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ORIGINAL ARTICLES

Medical Journalism in New England, 1788-1924

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PART I.

JOHN S. BILLINGS has written that it is as useless to advise a man not to start a new journal as it is to advise him not to commit suicide, and Samuel D. Gross, in his "History of American Medical Literature," published in 1876, has said of books—and the same may be applied to journals—"Some fall stillborn from the press, many die in their infancy, a few attain to a vigorous manhood, and, now and then, one is fortunate enough to reach old age."

According to the academic definition of the word, medical journalism, as consisting of the periodic publication of medical papers or transactions of societies, may be said to have existed, in the history of the world, since 1679. In that year the first publication to be devoted to medicine, "Nouvelles découvertes sur toutes les parties de la médecine," was published in Paris under the editorship of Nicholas de Blegny. This venerable sire of all succeeding medical periodicals attained the age of two years, suspending publication in 1681. That a considerable volume of water has passed under the bridge since then is evidenced by the fact that in 1914 there had been indexed in the Library of the Surgeon General's office, since 1880 only, 8,030 medical periodicals.

Medical journalism in the modern sense of the word is a result of the social conditions of the late eighteenth and early nineteenth centuries. Textile machinery had been invented; an industrial revolution was in progress; the plow had turned up a lower stratum of society and exposed it to the influence of increased incomes and better education. A greater number of people were taking an interest in the world about them and the political institutions that governed them. Obviously it became necessary to try to mold the opinion of this new addition to the reading and thinking public, and journalism and pamphleteering came into vogue.

The first to appreciate the importance along medical lines of this new era was Thomas Wakley, born in 1795, who was the real founder of medical journalism as an agency in the organization and direction of public opinion and in the reform of medical legislation. The *London Lancet*, under the editorship of Wakley, appeared first in 1823, and, the oldest medical weekly in the world, has been intimately connected with the Wakley family ever since. Previous to this time, medical journalism had consisted in the publication of scientific papers and society transactions. From that time on one of its important functions has been editorial in nature—influencing opinion and furthering reform.

The journals that have fallen stillborn from the press, or, lacking vitality, have died while still of tender years, have, in the main, come into the world for insufficient reasons and with future possibilities resting on too insecure foundations. Many of them have been individual attempts relying for their continuance on the resources of single editors, who started them, perhaps, for the purpose of preaching a personal message, advertising a single individual or confusing an enemy. Bearing this in mind it is interesting to note how few of these journals have survived a term of years longer than the average usefulness of an individual life. Many have been the official organs of the various cults, depending for the duration of their survival on the vigor of the cult; some have been frankly advertising mediums for men or methods.

We may, take it for granted, on the whole, that a journal, to continue its existence, must have a reason for existence. It must be the vehicle of expression of an acknowledged specialty, or the official organ of a stable society; in other words it must have a motive that appeals to a sufficient number of persons who are able and willing to support it. Most of our journals now current have such justification; those that have not had it have fallen by the roadside or are doomed so to fall.

Although the publication of any periodicals devoted to medicine did not occur until some time later, it may be of passing interest to mention the earliest known medical publication of any sort in this country. This consisted of a single sheet or broadside, published in Boston in 1677, of which a fac simile is on view in the Boston Medical Library. This interesting document bears the caption "A Brief Rule to guide the Common People of New England How to order Themselves and theirs in the Small Pocks, or Measels." A description of the disease with cautions as to the treatment follows, and in concluding the author says, modestly enough:

"These things have I written, Candid Reader, not to inform the Learned Physitian that hath much more cause to understand what pertains to this disease than I, but to give some light to those that have not such advantages, leaving the difficulty of this disease to the Physitians Art, wisdome, and Faithfulness; for the right managing of them in the whole Course of the disease tends both to the Patients safety, and the Physitians desired Success in his Administrations: For in vain is the Physitians Art imployed, if they are not under a Regular Regiment. I am, though no Physitian, yet a well wisher to the sick: And therefore intreating the Lord to turn our hearts, and stay his hand, I am

A Friend, Reader to thy
Welfare,
THOMAS THACHER

Boston, Printed and sold by John Foster. 1677.

As regards smallpox, it is of some interest to recall that vaccination was introduced into this country in 1800 by Benjamin Waterhouse, of Cambridge, who brought home from his studies abroad some of Jenner's virus. Waterhouse apparently was proud of this distinction, for report, perhaps malicious, has it that periodically over a number of years an insertion appeared in the *Colonial Centinel* advertising the loss, between Boston and Cambridge, of a gold snuff box bearing the inscription "From the Jenner of the Old World to the Jenner of the New," and requesting the finder to return it to Dr Waterhouse. Dr. Waterhouse was an important factor in the founding of the Harvard Medical School, and its first professor of medicine.

The Medical Society of New-Haven County in the State of Connecticut, founded in 1784, published in 1788 a slim volume of "Cases and Observations," which, early as it was and small as it was, has the distinction of containing Hezekiah Beardsley's original account of congenital pyloric stenosis. This was followed in 1790 by the Massachusetts Medical Society, which commenced the publication of "Medical Papers Communicated to the Massachusetts Medical Society, to which are subjoined extracts from various authors, containing some of the improvements which have lately been made in physic and surgery." The title of volumes 3 and 4, issued in 1822 and 1829, is "Medical Dissertations Delivered at the Annual Meetings of the Massachusetts Medical Society." These transactions continued to be published at irregular intervals until July 1, 1914, when their function was taken over by the BOSTON MEDICAL AND SURGICAL JOURNAL.

Although antedated by these Transactions, the first bona fide medical journal of the country, the *Medical Repository*, appeared in New York in 1797, edited by Elihu H. Smith, S. L. Mitchell and Edward Miller. It continued in existence for twenty years. Dr. Smith, we are told, was born in Connecticut, educated at Yale, and completed his medical studies at Philadelphia. Besides being a medical editor he "wrote much for the magazines of the day, wrote a play, a poetical epistle to the author of the Botanic Garden, various sonnets and several descriptive pieces." He died in 1798 of yellow fever. In 1812 Dr. Miller also died, of typhoid fever, and Dr. Mitchell, the surviving member, associated with himself in the publication of the *Repository* Dr. James R. Manley, Dr. Felix Pascalis, and Dr. Samuel Ackerley. Dr. Manley succeeded Dr. Mitchell as editor-in-chief.

Philadelphia may claim the distinction of having been the birthplace of America's second medical periodical. This was *The Philadelphia Medical and Surgical Journal*, first published under the editorship of Dr. Benjamin Smith Barton in 1803. In 1804 it was succeeded by the *Medical Museum*, edited by Dr. John Redman Coxe, and continued until 1813. Revived by Dr. Nathaniel Chapman in 1820, it continued until 1828, when it was succeeded by *The American Journal of Medical Sciences* which has continued its notable career up to the present time, holding the distinction of being the oldest current medical journal in the country and the only one of greater age than the BOSTON MEDICAL AND SURGICAL JOURNAL, although, unlike the BOSTON JOURNAL, not in continuous existence.

The third center at which medical journalism made its appearance in the new world was Baltimore, we are told by Dr. Green in his interesting account of the "Early History of Medical Journalism in New England." "Here in 1809," he writes, "Dr. Tobias Watkins began the publication of the *Baltimore Medical and Physical Recorder;* and in 1811 Dr. Nathaniel Potter established the *Baltimore Medical and Philosophical Lyceum*. These two periodicals were both of short duration, but they are evidence of the early importance of Baltimore as a center of medical education and progress."

Perhaps the earliest journal in New England pertaining at least in part to the science of medicine was *The Medical and Agricultural Register,* "Containing practical information on husbandry, cautions and directions for the preservation of health, management of the sick, etc. Designed for the use of families. Conducted by Daniel Adams." This monthly journal, published at Boston from January, 1806, to December, 1807, was apparently designed for the laity, and was probably edited by a layman. As such it could not with strict accuracy be classed as the earliest medical journal in New England, but deserves some mention because of its relative antiquity and its apparent interest in the public health.

Actually the first true medical journal of New England was *The New England Journal of Medicine and Surgery and the Collateral Branches of Science,* a quarterly periodical published in Boston, making its first appearance in January, 1812. This, with *The Boston Medical Intelligencer,* a weekly journal started in 1823, and the BOSTON MEDICAL AND SURGICAL JOURNAL, formed in 1828 by the union of the above two, compose the most important triad of New England journals, worthy of special consideration and more detailed description which they will be accorded later.

The year 1823 had also the distinction of introducing to the medical public another journal which antedated by three months *The Boston Medical Intelligencer.* This was the *Monthly Journal of Medicine,* "containing selections from European Journals, the transactions of learned societies, etc., and embracing a concise analysis of the Medical journals of the United States. Conducted by an Association of Physicians. Quaeremus, ex omnibus—ut levia semper rejiciamus, et non necessaria—Cicero." This paper, published in Hartford, ran through six complete volumes, from January, 1823 to December, 1825. As its description implies, it was largely a digest, composed of translations, abstracts and reviews. The first volume is found to contain, among other items, Dr. Jenner on "Artificial Eruptions," Baron Larrey on "Epilepsy," and Dr. Webster on "Hooping Cough." The medical literature of the United States of that day was reviewed, consisting, in this volume, of *The Philadelphia Journal of the Medical and Physical Sciences, The New England Journal of Medicine and Surgery, The American Medical Recorder* and *The New York Medical and Physical Journal.* In succeeding volumes we find added to these the *New York Medical Repository and Medical Review,* and the *Analectic Journal.*

The *Medical Advocate* appeared in Boston in 1827 and continued until the following year, and in 1827 also appeared the *American Journal of Foreign Medicine.* This was conducted, in true orthodox fashion, "by an association of physicians." Boston was its birth place, but an unlucky star must have been in the ascendency, for although designed to appear monthly it did not survive its first issue. This number contains an article reprinted from Sir Astley Cooper, and a case report of "Puncture of the Pericardium, Performed by Mr. Jouett, of Nottingham, England."

The Medical Magazine, a monthly, edited at Boston, survived the publication of three annual volumes, beginning in 1832. The Temple of Minerva, flanked by pedestaled Aesculapius and Hygeia, adorns the frontispiece, and in introducing their publication to the world the editors "therefore forbear to encumber their first pages with the usual editorial salutations, entreaties, and promises; but commit this little pamphlet to the ingenuous community among whom it is to circulate, with entire confidence that it will secure its share of favor and patronage while it continues to be active in the pursuit and diffusion of Medical Science, and true to the interests and honor of the Medical Profession, to the members of which throughout the country it is, with fraternal greetings, respectfully dedicated by,

ABEL L. PEIRSON }
JOSHUA B. FLINT } *Editors*
ELISHA BARTLETT }

Boston, July 15, 1832

The first number of this journal announces the incorporation and establishment of the Boston Lying In Hospital, and, so long as it continued, it published the papers of the Boston Society for Medical Improvement.

The same decade witnessed the opening and closing of the short career of the quarterly *Annals of Phrenology,* published in Boston from 1833 to 1835. A brief account of the now almost forgotten Boston Phrenological Society and the pseudo-science which it fostered may perhaps be of interest in this connection, especially since the data concerning it has so recently been collected and published by Dr. J. Collins Warren in the *Annals of Medical History.*

F. J. Gall, the leader of this cult, was born at Baden in 1758, graduated in medicine in Vienna in 1785, and died at Montrouge in 1838. His pupil and friend, John Gasper Spurzheim, was born in Germany in 1776. Their science was based on cerebral localization, but unfortunately they assigned psychological rather than physiological functions to this localization; moreover they believed that the skull itself shared the effects of the over- or underdevelopment of the cortical areas. Those who have read Captain Marryat's "Mr. Midshipman Easy" will recall the enthusiasm with which Easy's father threw himself into the study of this subject, and the machine which he invented for reducing or developing the proper cranial bumps; also his untimely end while practicing upon himself.

Gall and Spurzheim were earnest and ardent seekers after knowledge. They believed that they had discovered a fundamental truth, and they were almost right. They were real pioneers in studying the functional anatomy of the brain, but their deductions were wrong and their ultimate reward has been ridicule instead of praise.

Spurzheim, after a successful lecture tour of the continent, came to Boston in the fall of 1832, bringing with him a large collection of illustrative skulls and plaster skull casts. A man of pleasing personality, he was well received and soon had a large following, but his successes were cut short by typhoid fever in November of the same year. He was buried in Mt. Auburn Cemetery, and on the eve of his funeral, November 17, the Boston Phrenological Society was formed. This society had an active career for a short time, but, interest waning, it became inactive in 1842 and Spurzheim's collection was bought by Dr. John Collins Warren and later placed in the Harvard Medical School Building on Fruit St. In the course of time the collection gravitated to the basement and was forgotten until, in recent years, when the building came to be torn down to make room for the new administration building of the Massachusetts General Hospital, Dr. Reginald H. Fitz found the workmen driving pickaxes into the casts. He hastened with this news to Dr. J. Collins Warren, grandson of the original purchaser of the collection, who had it removed to the new Medical School where it at present reposes—still in the basement.

The first third of the nineteenth century saw the conception of other cults, and it must be admitted that many of these cults were based on a grain of reason, well diluted. Samuel Thompson, or Thomson, founder of the system that bears his name, was born in 1769. He was an irregular practitioner, located for the most time in Beverly, Mass., where he treated his patients with steam and lobelia as curative agents. His system flourished in New England for some twenty years, dying with its founder in 1843. That it flourished may be attested to by the *Boston Thomsonian Manual and Lady's Companion*, later the *Boston Thomsonian Manual*, existing from 1834 to 1842; the *Thomsonian Messenger*, edited at Norwich, Connecticut, by O. B. Lyman from 1841 to 1843; and the fact that it was approved, in private and with reservations, by such men as Samuel L. Mitchell and Benjamin Waterhouse. Its real value is tersely summarized in an editorial printed in the *Berkshire Medical Journal* in 1861, in the statement that "Thompsonism fostered a prejudice against mineral medicines by a timely birth when the world was salivated."

Another cult of this period brought forth *The Moral Reformer and Teacher on the Human Constitution*, edited monthly by William A. Alcott from 1835 until 1836, after which it continued as the *Library of Health and Teacher on the Human Constitution*, finally merging with the *Graham Journal of Health and Longevity*, "Designed to illustrate by facts, and sustain by reason and principles, the science of human life as taught by Sylvester Graham," a weekly journal that had been edited by David Campbell since 1837. The bewildering number of aliases that many of these journals of unstable character assumed may sometimes be a source of confusion to the medical antiquarian. *The Mesmeric Magazine or Journal of Animal Magnetism*, appearing in Boston in 1842, had probably too short a life to have acquired this habit.

There were two journals, however, that strove to keep up this reputation. *The Monthly Miscellany and Journal of Health* appeared first in 1846, but in the following year appeared as *The Practical Educator and Journal of Health*; apparently health won in its struggle with education, for another year found it posing as *The Journal of Health and Practical Educator.* This name was satisfactory for some time for it was not until 1863 that it became *The Monthly Union and Journal of Health and Education.* Finally, after five years, it wearied of this monotony and changed to *The Guardian of Health.* Less spectacular was the re-christening of *The New England Medical Eclectic and Guide to Health*, edited by Calvin Newton, of Worcester, from 1846 to 1847, in which year it became *The New England Botanic, Medical and Surgical Journal*, published semi-monthly; in 1851 it appeared as *The Worcester Journal of Medicine*, and finally, in 1857, merged in the *College Journal of Medical Science*, in Cincinnati. The Eclectics, somewhat like the Thomsonians, used vegetable remedies and avoided mercury as a protest against the existing overuse of calomel.

Connecticut, as we have seen, had the distinction of publishing the first Society Transactions in 1788. Vermont's first contribution was in 1846 when *The Green Mountain Spring* appeared, "devoted to discussion and information concerning the popular medical uses of water, etc." This continued in existence until 1848. Rhode Island, in the same year, produced the *Rhode Island Medical Reformer.* "A family journal for the preservation of health and longevity." The first New Hampshire journal of which any record can be found was the *Granite State Medical Revolutionist and Hygienic Advertiser*, edited at Manchester in 1850. In the same year the *New Hampshire Journal of Medicine* made its appearance at Concord.

Maine, however, had already entered the lists of journalism in 1834 when the first and only issue of *The Journal of the Medical Society of Maine* was published at Hallowell. Following this, the first attempt to establish a medical journal was made by the Maine Medical Association in 1857, when a committee of investigation was appointed. Nothing came of this attempt, for during the investigation, in 1858, the *Portland Medical and Surgical Reporter* was started, although it was published less than two years. In 1859 Aaron Young, at Farmington, issued the only number of the *Franklin County Journal of Aural Surgery and Rational Medicine.* This contained, we are told, an excellent biography of Professor Cleveland, chemical professor at Bowdoin. The Maine Academy of Medicine and Science, due largely to the interest of Dr. Searle of Portland, launched the

Journal of the Maine Academy of Medicine and Science in 1894. Dr. Searle, beside being a physician and editor, had a strong musical bent, for he was a clarinet player in an orchestra, wrote a book on "Appreciation of Art," and planned another on "History of Music."

Another interesting Massachusetts journal was the excellent but short-lived *Berkshire Medical Journal*, which comprised one volume in 1861, published at Pittsfield. This publication, appearing monthly, was edited by William Henry Thayer, professor of Theory and Practice of Medicine in Berkshire Medical College, and R. Cresson Stiles, of Pittsfield, professor of Physiology and Pathology. The journal contained the proceedings of the Berkshire Medical Society, original articles, and abstracts.

Two other journals must be mentioned before taking up in more detail the BOSTON MEDICAL AND SURGICAL JOURNAL and its forbears. In July, 1842, *The New England Quarterly Journal of Medicine and Surgery* made its debut under the joint editorship of Charles E. Ware and Samuel Parkman, and continued until June, 1843. In the issue for October we find "Notes on Anhaemia, principally in its connection with the Puerperal State, and with Functional Diseases of the Uterus: with Cases," by Walter Channing, M. D. A footnote informs the reader that "The specific name for this disease is sometimes written Anaemia, but incorrectly.—Study of Medicine."

The two outstanding papers that this journal published, however, and which alone are sufficient to save it from oblivion, are Jacob Bigelow's "Self-limited Diseases" and Holmes' most famous essay, "The Contagiousness of Puerperal Fever." This epoch making article was read before the Boston Society for Medical Improvement and published by request of the Society in the issue of April, 1843.

The Massachusetts Homeopathic Society had also its official organ, a journal with a comparatively long and certainly honorable career. *The New England Medical Gazette*, "A monthly journal of homeopathic medicine, surgery and the collateral sciences," issued its first number in Boston in 1866 and continued publication until 1918.

Originally edited by H. C. Angell, I. T. Talbot and W. T. Helmuth, it has been edited from 1884 to 1898 and from 1906 to 1912 by Dr. John P. Sutherland, until recently dean of the Boston University School of Medicine, with various assistants. Dr. John L. Coffin, assisted by Dr. Walter Wesselhoeft, Dr. Conrad Smith and Dr. A. T. Lovering managed the paper from 1899 until 1902, after which it was edited by Dr. Lovering in 1903 and 1904. Dr. Wesselhoeft was sole editor in 1905. From 1913 until 1916 Dr. Dewitt G. Wilcox was editor with Dr. Arthur Ring and others; Dr. Sanford B. Hooker was editor during the remaining two years of its existence.

Since going to press the following information has been received from M. O. Boynton, Librarian of the College of Medicine of the University of Vermont:

In January, 1895, the first medical journal was started and published in Burlington under the name of "The Vermont Medical Monthly, A Journal of Review, Reform, and Progress in the Medical Sciences."

This publication was continued through twenty volumes, the last number being the December issue of 1914. It was owned and published by H. Edwin Lewis, M.D., who was the managing editor, and he had as associate editors A. P. Grinnell, M.D., Dean of the Medical Department of the University of Vermont, Burlington, Vt.; D. C. Hawley, M.D., Secretary of the Vermont Medical Society, Burlington, Vt.; A. B. Bisbee, M.D., Medical Director of the National Life Insurance Company, Montpelier, Vt.; G. P. Conn, A.M., M.D., Secretary of the New Hampshire Medical Society, Concord, N. H.; F. A. Rich, V.S., M.D., Burlington, Vt.; C. S. Caverly, M.D., President of the State Board of Health, Rutland, Vt.; S. C. Gordon, M.D., President of the Maine Academy of Medicine, Portland, Me.; J. N. Jenne, M.D., Lecturer on Materia Medica and Therapeutics at the University of Vermont, Burlington, Vt.; J. A. Howland, M.D., Physical Director of the Providence Y. M. C. A. and High School, Providence, R. I.

In the December issue of this year 1895 we note the addition to the editorial board of the name of D. H. Calder, M.D., House Surgeon at Mary Fletcher Hospital, Burlington, Vt. Also in this issue we learn that the journal had become the official organ of the Vermont State Medical Society, a vote to that effect having been taken at the annual meeting of the Society in October.

For a short period Mr. Harris H. Walker served as business manager, but his place was later filled by Frank C. Lewis, M.D., and about this time Drs. Rich, Howland and Calder severed their connection with the journal and their places were taken by A. Lapthorn Smith, M.D., Montreal; J. M. French, M.D., Milford, Mass.; F. S. Hutchinson, M.D., Enosburg Falls, Vt.

With the September issue of 1905, Dr. Lewis severed his connection with the journal to become the managing editor of the *International Journal of Surgery* of New York, and at this time sold the publication to H. C. Tinkham, M.D., Professor of Anatomy and Clinical Surgery and Dean of the College of Medicine; B. H. Stone, M.D., then Instructor in Bacteriology; C. F. Dalton, M.D.; Mr. H. L. White.

The next month, October, 1905, appeared the first number under the new management, with Drs. Tinkham and Stone as editors, Dr. Dalton as managing editor, and Professor White as business manager, and these were assisted by the former associate editors.

Three months later it was incorporated under the name of the Burlington Medical Publishing Company.

In January, 1906, the Monthly entered upon the twelfth year of its existence and was placed upon a sound financial basis, as hereafter it was published by the Burlington Medical Publishing Company, Incorporated.

The editors now brought to their assistance as collaborators Dr. G. H. Gordon of Bellows Falls, Vt.; Dr. J. B. Wheeler of Burlington, Vt.; Dr. A. F. King of Portland, Me.; Dr. A. J. Wilding of Malone, N. Y.; and in 1908 Dr. L. P. Sprague of Burlington, Vt., and Dr. M. B. Hodskins of Palmer, Mass., were added to the staff.

Under this management the Monthly was continued through the following years until Volume 20, 1914, was completed, and throughout its existence it continued to be the official organ of the Vermont State Medical Society.

With the December issue of that year the Vermont Medical Monthly was discontinued after an honorable existence of 19 years, and the reason for this step being taken is best given in the editor's own words:

"With this number the Vermont Medical Monthly completes the twentieth volume. The Journal has been under the present management for nearly seven years. During this time every effort has been made to publish a journal that should meet the needs of the general practitioner. How far it has succeeded in serving the physicians of the State must be left with its readers to say.

"Conditions of medical publication have changed materially during seven years. The income from advertisements has steadily decreased, while the expense of printing has increased nearly or quite 25 per cent. With a local subscription it is not possible to meet the growing deficit; it is not possible to increase the subscription list sufficiently.

"We have carried the financial burden as long as it seems to us advisable. If the Journal has been of any service to the physicians of the State we shall feel repaid for our effort in maintaining it.

"Thanking our readers for the universal kindness and courtesy which we have always received and wishing you one and all the Compliments of the Season, the *Vermont Medical Monthly* bids you adieu."

The one hundred and second annual meeting of the Vermont State Medical Society was held at Burlington October 14 and 15, 1915, and at this time it was suggested that the Society might publish a medical monthly and so have an organ in the State for the publication of their transactions.

After some discussion it was voted to leave the entire matter in the hands of the Publication Committee, with authority to expend a stated sum for the printing and distribution of the proceedings of such meetings as the judgment of the committee might direct.

Accordingly, in January, 1916, there was printed at Rutland the first number of *Vermont Medicine*, "The Official Organ of the Vermont State Medical Society," conducted by the Publication Committee of this Society, consisting of James M. Hamilton, M.D., Rutland, Secretary; Charles F. Dalton, M.D., Burlington, Treasurer; A. Stewart M. Chisholm, M.D., Bennington, Editor.

In this number the editor says:

"In accordance with the action taken at the last annual meeting of the Society we have today the honor to present to you the first number of the journal, which, after some interruption, under a new name and in a slightly changed form, hopes to fulfill with more favorable auspices, the role formerly sustained so excellently by the *Vermont Medical Monthly.*"

In the October issue of this year we note Edward H. Martin, M.D., of Middlebury became treasurer in place of Dr. Dalton, and William G. Ricker, M.D., of St. Johnsbury became the secretary to fill the vacancy caused by Dr. Hamilton becoming acting business manager.

In February, 1918, Dr. C. F. Dalton again became a member of the Publication Committee to fill the vacancy caused by the death of Dr. Edward H. Martin.

An editorial in the July issue of this year reads:

"In the present issue of *Vermont Medicine* the name of Dr. J. M. Hamilton no longer appears as the acting business manager. He is now enrolled on the Honor List—a place which he has always merited, which he long strove for, and which he has at last attained.

"Without enumerating the various activities of the State of Vermont which have profited by his energy and enthusiasm, it is fitting that at this time we record the fact that to him alone is due whatever success has attended the publication of *Vermont Medicine*.

"We are glad to be able to announce that Clarence F. Bell, M.D., of Rutland has consented to assume the post of managing editor for the remainder of the year."

This editorial staff continued through the year, but in the December issue the Publication Committee announced that, owing to a combination of factors, it had finally decided that with this issue the publication of the journal should cease.

Thus after continuing through a period of three years the second and thus far the last medical journal to be published in Vermont ceased to exist.

Both publications were of a high order and held first rank with other local journals as the editors were men prominent in their profession and throughout the entire period of their service they adhered strictly to the policy they announced in the first issues: that they should endeavor to give a clean, reliable, ethical and helpful publication that would appeal in some especial way to its constituency.

PART II

Returning to *The New England Journal of Medicine and Surgery*, we find that the establishment of a journal in Boston was first proposed by Dr. John Collins Warren. Dr. Warren had returned some ten years before from his studies abroad, where, according to the custom of the time, he had served as surgical dresser in the London hospitals and had attended lectures in Paris; he had now settled in Boston as assistant to his father, both in practice and in the Department of Anatomy at the Medical School. About 1803 with John G. Coffin, James Jackson, John Dixwell, Bullard and Howard he had been instrumental in forming the Boston Society for Medical Improvement which continued at first for six years and was revived and incorporated in 1839, from thence continuing until the present day.

Dr. Jackson agreeing with the journal plan. Drs. John Gorham, Jacob Bigelow, and Walter Channing were invited to unite with them. Later Drs. George Hayward, John Ware and John W. Webster became connected with the enterprise and they formed a club which met every month to sup, and read and pass judgment on the articles submitted. The Journal was at this time the official organ of the Massachusetts Medical College.

The first issue of *The New England Journal of Medicine and Surgery and the Collateral Branches of Science*, "Conducted by a number of physicians," appeared in January, 1812. In this issue may be found as contributors Dr. John Warren, "Remarks on Angina Pectoris"; Dr. James Jackson, "Remarks on the Morbid Effects of Dentition"; Dr. John C. Warren. "Cases of Apoplexy with Dissections"; Dr. Jacob Bigelow, "Treatment of Injuries Occasioned by Fire"; and Dr. Walter Channing, "Remarks on Diseases Resembling Syphilis." There is also contained a notice from the *New York Medical Repository* on the first use of spurred rye, or ergot.

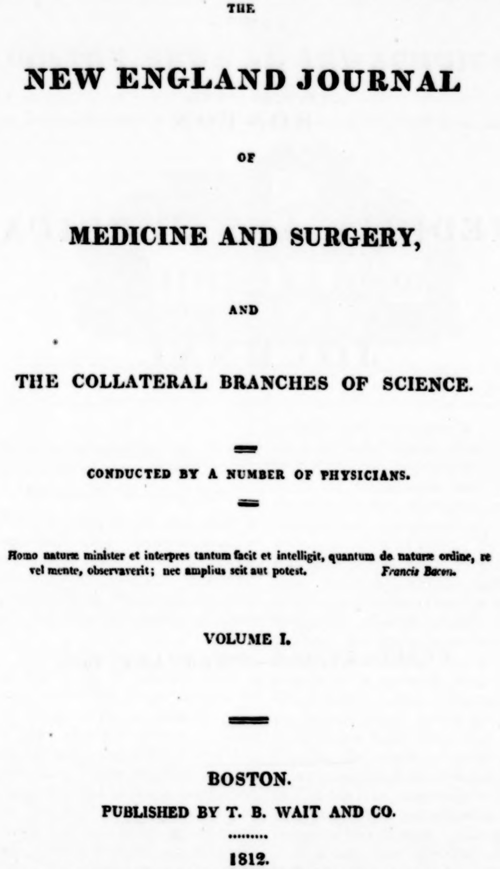
Dr. Warren had been born in 1778 and was, at the time of the establishment of the Journal, 34 years of age. With an education well up to the standards of the time, he had thrown himself into practice and academic work, first as assistant in anatomy and in 1815 as professor, a post he held for forty years. He was soon to become famous for his work in surgery, especially on tumors, and for his contributions to anatomy. The old Warren Museum on Chestnut St. will be recalled by a few, as will his paper on "Mastodon Giganteus." He was later, as we have seen, the purchaser of the Spurzheim collection. If for no other reason his name will always be remembered for the courage with which he lent it, in his later years, to the exploitation of ether anesthesia.

Dr. Walter Channing, born in 1786, had graduated from Harvard in 1808 and in medicine from the University of Pennsylvania in 1809, establishing himself in practice in 1812. In 1815 he was appointed first professor of obstetrics and medical jurisprudence in the Medical School. He was dean of the School from 1819 until 1847, and a member of the visiting staff of the Massachusetts General Hospital.

John Ware, born in Hingham in 1795, received his degree in medicine at Harvard in 1816 and began his practice in Duxbury, later removing to Boston. From 1823 until 1825 he edited the *Journal of Philosophy and the Arts*. He was president of the Massachusetts Medical Society from 1848 to 1852, and Hersey professor of the theory and practice of physic in the Medical School from 1856 to 1858, succeeding Dr. James Jackson. The editorship of *The New England Journal of Medicine and Surgery* finally passed entirely into the hands of Drs. Ware and Channing in 1824. In 1827 it was continued as *The New England Medical Review and Journal* until the following year.

The demand for a weekly journal had meanwhile given rise, in 1823, to *The Boston Medical Intelligencer;* "containing extracts from foreign and American journals, etc." This was conducted by Jerome V. C. Smith from April 29, 1823, the date of the first issue, until February 12, 1826. The third volume was edited by James Wilson, and Volumes 4 and 5 by John

G. Coffin who continued as proprietor and editor until 1828. The first proprietor had been Robert M. Peck; later the name of John Cotton appears.



THE

NEW ENGLAND JOURNAL

OF

MEDICINE AND SURGERY,

AND

THE COLLATERAL BRANCHES OF SCIENCE.

CONDUCTED BY A NUMBER OF PHYSICIANS.

Homo naturæ minister et interpres tantum facit et intelligit, quantum de naturæ ordine, re
vel mente, observaverit; nec amplius scit aut potest. *Francis Bacon.*

VOLUME I.

BOSTON.

PUBLISHED BY T. B. WAIT AND CO.

1812.

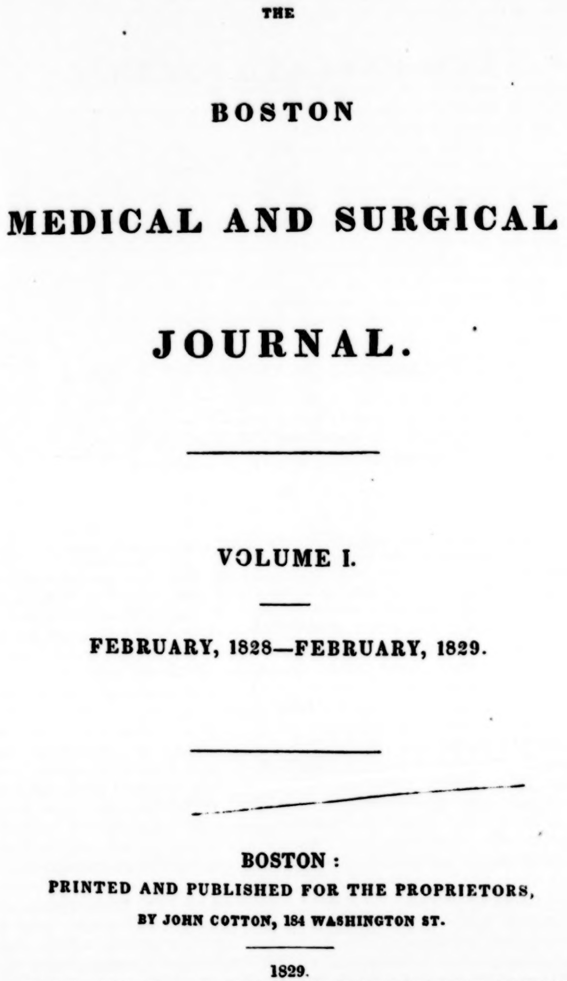
Facsimile of the Title Page of the first issue of the New England Journal of Medicine and Surgery.

It was announced in the first number that "It is the object of this paper to give opportunity of communicating, without delay, histories of recent cases; to develop the character of prevalent diseases; to furnish seasonable information as to the subjects that regard public health." In 1824 a staff of correspondents in other states was instituted. At first a four-page sheet, it changed in 1826 to an eight-page quarto and during the same year increased to sixteen pages.

The *Intelligencer* was apparently in financial difficulties, however, for in 1828 it was purchased by Drs. Warren, Ware and Channing for $600.00 (Dr. Warren taking two-thirds), and the two journals were united, Dr. Warren commencing the editorship.

The last issue of the *Intelligencer,* appearing on February 12, 1828, contains the following statement: "On Tuesday, next week, will appear the first number of the BOSTON MEDICAL AND SURGICAL JOURNAL, as a continuation of this paper. When we consider the number, the talents, and experience of the Editors of the forthcoming journal, and their abundant resources for matter, we cannot doubt that this paper will prove generally acceptable, because we feel an assurance that it must be interesting and useful."

Surgical Journal contains "A History of the Small Pox and Varioloid, in Boston and its Vicinity," by Jerome V. C. Smith, M. D., now Health Physician to the City of Boston; a communication on "Transfusion" by Walter Channing and also, by the same hand, a report of a case of diabetes mellitus dying in coma. The urine in this case "was noted as being of a remarkably sweet taste, which evaporated to the consistency of treacle." In the same volume Dr. Chandler Robbins periodically advertises "a private sulphur bath at his house which he will administer in cases of rheumatism and affections of the skin which require it." Dr. Channing, in the organization of the new journal, furnished reports from the medical department of the Massachusetts General Hospital, and Dr. Gorham prepared reports of the weather and diseases prevalent for the three months previous. As might be expected, Dr.



THE

BOSTON

MEDICAL AND SURGICAL

JOURNAL.

VOLUME I.

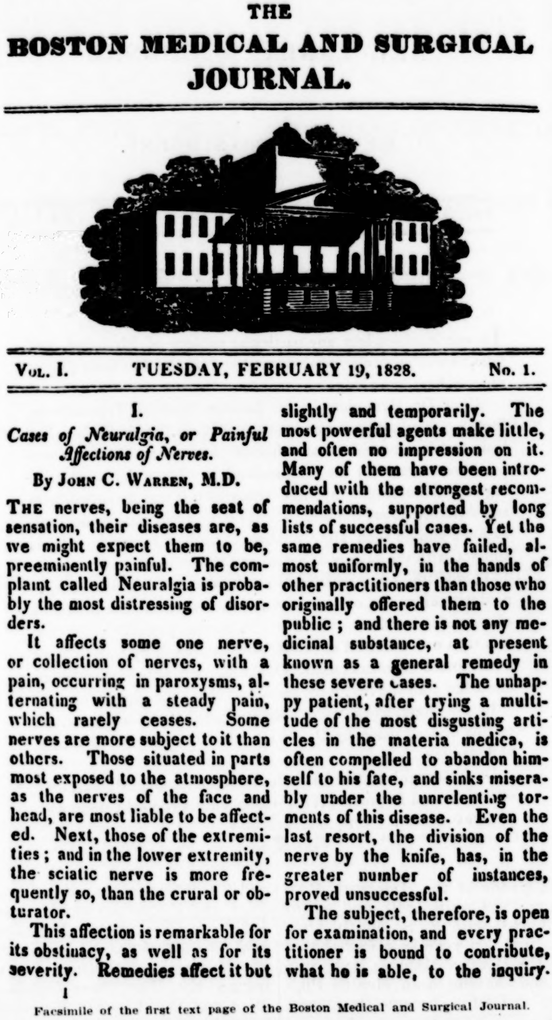
FEBRUARY, 1828—FEBRUARY, 1829.

BOSTON:
PRINTED AND PUBLISHED FOR THE PROPRIETORS,
BY JOHN COTTON, 184 WASHINGTON ST.

1829.

Facsimile of Title Page of the first issue of the Boston Medical and Surgical Journal.

Warren was a frequent contributor, among many articles written by him "Observations upon Ulceration of the Kidneys, with Cases," being of great interest. His most notable and classical contribution—perhaps the most important in New World medicine—"Inhalation of Ethereal Vapor, for the Prevention of Pain in Surgical Operations" appeared on December 9, 1846. As a corollary to this there appeared, on April 21, 1847, "Some Account of the First Use of Sulphuric Ether by Inhalation in Surgical Practice," by Dr. George Hayward, who performed the first major surgical operation with ether anesthesia.



THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

Vol. I. TUESDAY, FEBRUARY 19, 1828. No. 1.

I.

Cases of Neuralgia, or Painful Affections of Nerves.

By John C. Warren, M.D.

The nerves, being the seat of sensation, their diseases are, as we might expect them to be, preeminently painful. The complaint called Neuralgia is probably the most distressing of disorders.

It affects some one nerve, or collection of nerves, with a pain, occurring in paroxysms, alternating with a steady pain, which rarely ceases. Some nerves are more subject to it than others. Those situated in parts most exposed to the atmosphere, as the nerves of the face and head, are most liable to be affected. Next, those of the extremities; and in the lower extremity, the sciatic nerve is more frequently so, than the crural or obturator.

This affection is remarkable for its obstinacy, as well as for its severity. Remedies affect it but slightly and temporarily. The most powerful agents make little, and often no impression on it. Many of them have been introduced with the strongest recommendations, supported by long lists of successful cases. Yet the same remedies have failed, almost uniformly, in the hands of other practitioners than those who originally offered them to the public; and there is not any medicinal substance, at present known as a general remedy in these severe cases. The unhappy patient, after trying a multitude of the most disgusting articles in the materia medica, is often compelled to abandon himself to his fate, and sinks miserably under the unrelenting torments of this disease. Even the last resort, the division of the nerve by the knife, has, in the greater number of instances, proved unsuccessful.

The subject, therefore, is open for examination, and every practitioner is bound to contribute, what he is able, to the inquiry.

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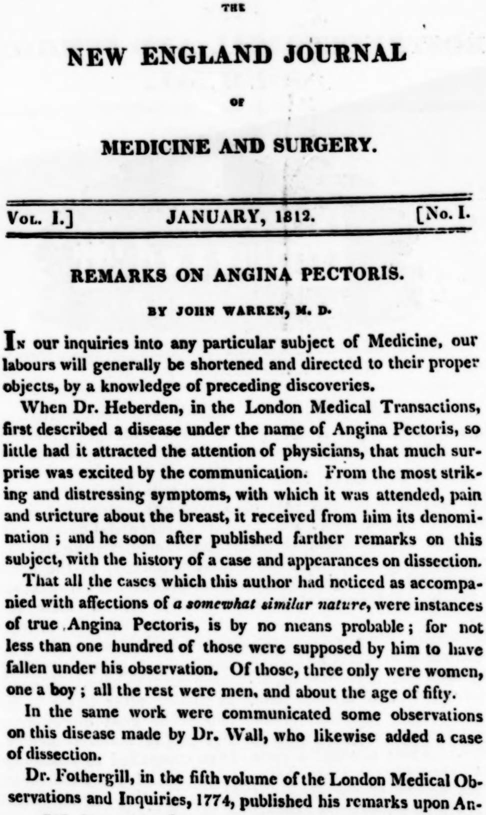
Facsimile of the first text page of the Boston Medical and Surgical Journal.

Dr. Warren, during the first quarter century of the Journal's existence, was the dominant figure in New England medicine. At the time of its founding he was fifty years old, and in the words of his biographer, "At this period, he rose in winter, and breakfasted by candle light

Dr. Jerome V. C. Smith was for thirty-four years an outstanding figure in New England Medical Journalism. Beginning with his editorship of the *Intelligencer* in 1823, he became sole editor of the BOSTON MEDICAL AND SURGICAL JOURNAL in 1835, editor of the *American Medical Almanac* from 1839 until 1840, and editor of the *Medical World*, with E. S. Smith, from 1856 to 1857. In this last year he also resigned the editorship of the BOSTON MEDICAL AND SURGICAL JOURNAL, and, having been Health Physician to the City of Boston, became its mayor.



THE

NEW ENGLAND JOURNAL

OF

MEDICINE AND SURGERY.

VOL. I.] JANUARY, 1812. [No. I.

REMARKS ON ANGINA PECTORIS.

BY JOHN WARREN, M. D.

IN our inquiries into any particular subject of Medicine, our labours will generally be shortened and directed to their proper objects, by a knowledge of preceding discoveries.

When Dr. Heberden, in the London Medical Transactions, first described a disease under the name of Angina Pectoris, so little had it attracted the attention of physicians, that much surprise was excited by the communication. From the most striking and distressing symptoms, with which it was attended, pain and stricture about the breast, it received from him its denomination; and he soon after published farther remarks on this subject, with the history of a case and appearances on dissection.

That all the cases which this author had noticed as accompanied with affections of *a somewhat similar nature*, were instances of true Angina Pectoris, is by no means probable; for not less than one hundred of those were supposed by him to have fallen under his observation. Of those, three only were women, one a boy; all the rest were men, and about the age of fifty.

In the same work were communicated some observations on this disease made by Dr. Wall, who likewise added a case of dissection.

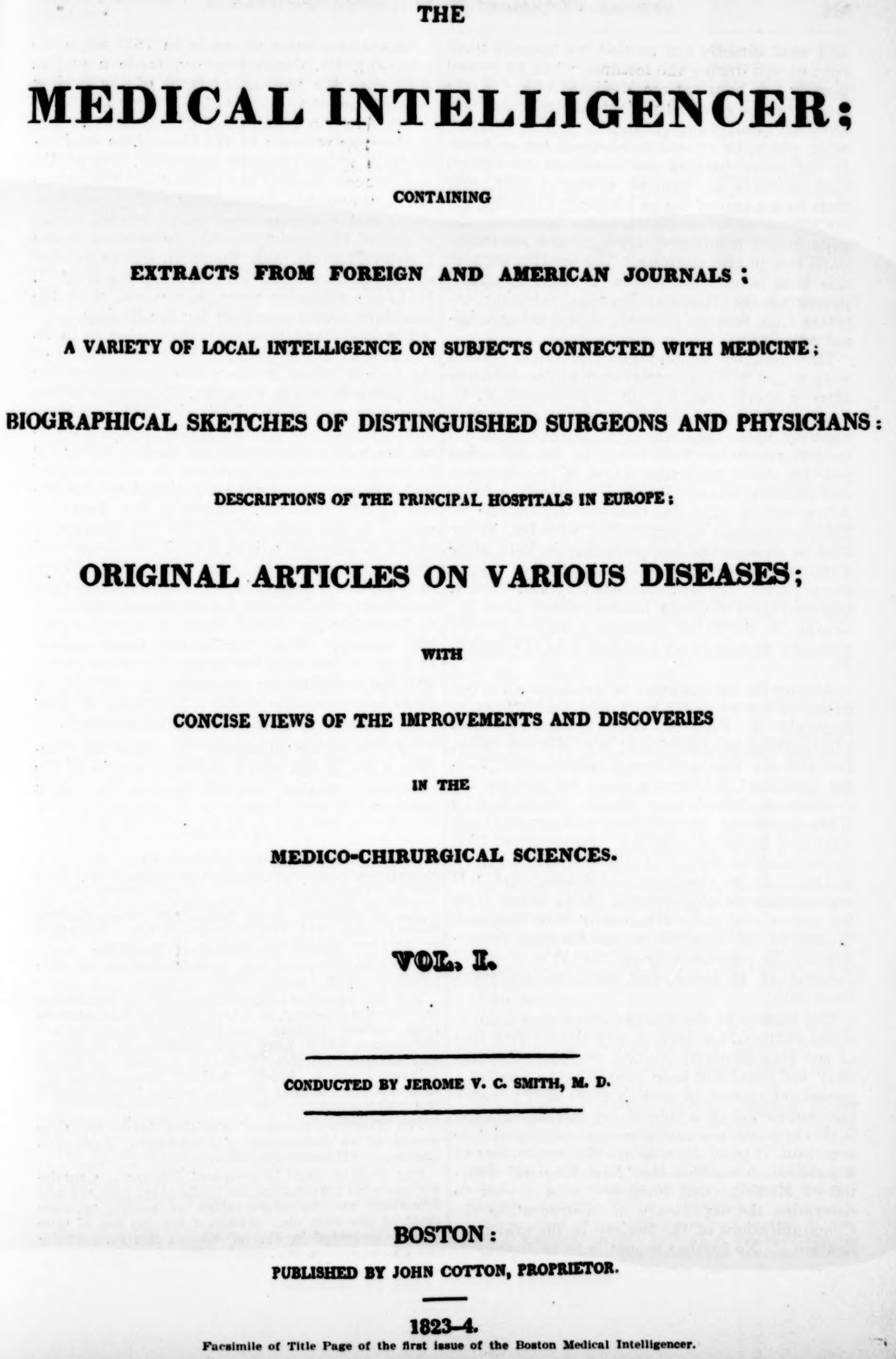
Dr. Fothergill, in the fifth volume of the London Medical Observations and Inquiries, 1774, published his remarks upon An-

VOL. I. 1

Facsimile of the first text page of the New England Journal of Medicin and Surgery.

The BOSTON MEDICAL AND SURGICAL JOURNAL issued its first number on February 19, 1828, one week after the final bow of the *Intelligencer*. At the time of its commencement there were in existence in the United States eight medical journals of any prominence, namely: in Philadelphia, *The American Journal of the Medical Sciences, The American Medical Recorder, The Monthly Journal of Foreign Medicine, The North American Medical and Surgical Journal,* and *The Philadelphia Monthly Journal of Medicine and Surgery* (which ceased February 28, 1828); in New York, *The New York Medical and Physical Journal;* in Cincinnati, *The Western Medical and Physical Journal;* and in Lexington, Ky., *The Transylvania Journal of Medicine and the Associate Sciences.* Prior to this time thirty-one medical journals had been commenced in the United States, twenty-three of which had suspended or merged in other journals (Billings).

The first volume of the BOSTON MEDICAL AND



THE

MEDICAL INTELLIGENCER;

CONTAINING

EXTRACTS FROM FOREIGN AND AMERICAN JOURNALS;

A VARIETY OF LOCAL INTELLIGENCE ON SUBJECTS CONNECTED WITH MEDICINE;

BIOGRAPHICAL SKETCHES OF DISTINGUISHED SURGEONS AND PHYSICIANS:

DESCRIPTIONS OF THE PRINCIPAL HOSPITALS IN EUROPE;

ORIGINAL ARTICLES ON VARIOUS DISEASES;

WITH

CONCISE VIEWS OF THE IMPROVEMENTS AND DISCOVERIES

IN THE

MEDICO-CHIRURGICAL SCIENCES.

VOL. I.

CONDUCTED BY JEROME V. C. SMITH, M. D.

BOSTON:

PUBLISHED BY JOHN COTTON, PROPRIETOR.

1823–4.

Facsimile of Title Page of the first issue of the Boston Medical Intelligencer.

and went directly out to visit his patients until one; except during the lectures, when he passed usually two hours at the Medical College. From one to two he received patients at his house. He devoted about twenty minutes to his dinner; after which, he retired to his room for an hour. In the latter part of the afternoon, he visited such patients as required a second visit, and then took a cup of tea in his study at seven; after which, he wrote and worked upon the subjects before mentioned, often, if not generally, until two in the morning. The greater part of this time he devoted to the 'Medical Journal,' preparing the Hospital Records, selecting extracts from foreign journals, and writing original articles."

Dr. Chandler Robbins and Dr. James Wilson were added to the editorial staff of the Journal after a short time, but in 1835 Dr. J. V. C. Smith had become sole editor, continuing in this capacity until 1854 when Dr. George S. Jones became associated with him. In the following year Dr. Jones gave way to Drs. W. W. Morland and Francis Minot. Dr. Smith retired in 1857. After various editorial changes Dr. George B. Shattuck became editor in 1881 with Dr. Abner Post as assistant editor, resigning in 1912 after a continuous service as editor-in-chief of thirty-seven years. He was succeeded by Dr. Taylor, and in 1915 Dr. Green became editor, with Dr George G. Smith as assistant editor. A complete list of editors will be found in the appendix.

Among the contributors to the Journal many names of prominence stand out; such names as Reginald H. Fitz, S. Weir Mitchell, Austin Flint, Abraham Jacobi and Sir William Osler. Dr. Holmes was a frequent contributor, having published the famous poem written for the Centennial Anniversary of the Massachusetts Medical Society in 1881, and "Medical Highways and Byways" and the "Farewell Address to the Medical School of Harvard University" in 1882. As Dr. Green says of the Journal, "It represents a worthy survival of the fittest from the past of medical journalism in New England. It derives its form from the *Medical Intelligencer*, its substance from the *New England Journal of Medicine and Surgery*, its spirit from both.'"

The history of the Boston Medical and Surgical Journal has been closely linked with that of the Massachusetts Medical Society. The Society for years had been proposing to publish a periodical journal of medicine, the first proposition appearing in a vote of the Society of June 5, 1811, when a committee was appointed "to ascertain, if possible, who are the conductors of a publication entitled the 'New England Journal of Medicine and Surgery,' with a view to determine the expediency of incorporating the Communications of the Society in the said publication." No further report is to be found.

The matter came up again in 1847 when the president, Dr. Jacob Bigelow, made a motion that when the permanent fund of the Society should amount to $10,000 the income should be devoted to the publication of a journal. The motion was referred to the Committee on Publications which reported favorably, but at the next council meeting the publication was indefinitely postponed. In the year 1913 it was proposed that a special department devoted to the affairs of the Society should be created in the Boston Medical and Surgical Journal, still an independent publication, and on July 1, 1914, the affiliation went into effect, with the Secretary acting as editor for the Society.

The latest and most important change in its affairs came about when, in 1920, the council of the Society voted to enter into negotiations for the purchase of the Journal. The negotiations proved successful and in April, 1921, a reorganization took place, since which time the Journal has been published by the Society under the direction of a managing editor, an editorial staff and a committee of nine appointed by the Society. Dr. Walter P. Bowers at this time succeeded to the editorship, with Dr. George G. Smith as associate editor, Drs. W. B. Breed and the writer joining the board as associate editors in 1922. The Journal has thus fulfilled the most important requirement for continued existence, by becoming the official organ of a well organized society. What the future holds cannot be foretold, but with the centennial of the Journal approaching the sentiment grows that it could best serve the medical profession of New England by representing the entire territory.

The following appendix furnishes as complete a list as has been possible to obtain of the periodicals related to medicine that have been published in New England.

APPENDIX

Cases and Observations by the Medical Society of New-Haven County in the State of Connecticut. New Haven, 1788.

The Proceedings of the Connecticut State Medical Society, 1805, 1811, 1818-19, 1824, 1826-88. Published at Hartford until 1818, then at New Haven.

Communications of the Medical Society of Connecticut. New Haven, 1810.

Medical Papers Communicated to the Massachusetts Medical Society, to which are subjoined extracts from various authors, containing some of the improvements which have lately been made in physic and surgery. Boston, 1790-July 1, 1914. (Title of volumes 3 and 4, 1822-29, "Medical Dissertations Delivered at the Annual Meetings of the Massachusetts Medical Society.")

The Monthly Journal of Medicine. Hartford. Conducted by an Association of Physicians. Vols. I-VI, January, 1823-December, 1825.

The Medical and Agricultural Register. Containing practical information on husbandry, cautions and directions for the preservation of health, management of the sick, etc. Designed for the use of families. Conducted by Daniel Adams, Boston. (monthly) January, 1806-December, 1807.

The New England Journal of Medicine and Surgery and the Collateral Branches of Science. Conducted by a number of physicians. (quarterly) Boston. January, 1812-December, 1826. Continued as the *New England Medical Review and Journal*, conducted by Walter Channing and John Ware, 1827, also called Vol. 16 of *The New England Journal of Medicine and Surgery.* United with the *Boston Medical Intelligencer* in 1828 to form the BOSTON MEDICAL AND SURGICAL JOURNAL.

The Boston Medical Intelligencer, containing extracts from foreign and American journals, etc. Conducted by Jerome V. C. Smith (weekly) April 29, 1823-February 12, 1826. Vol. 3 edited by James Wilson; Vols. 4-5 by John G. Coffin, then united with the *New England Journal of Medicine and Surgery* to form the BOSTON MEDICAL AND SURGICAL JOURNAL.

American Journal of Foreign Medicine. Conducted by an association of physicians. (monthly) Boston. No. 1, Vol. I, June, 1827.

The Medical Advocate. 1827-28. Boston.

THE BOSTON MEDICAL AND SURGICAL JOURNAL. (weekly) February 19, 1828-(current).

The Monthly Journal of Medical Literature and American Students' Gazette. Edited by E. Bartlett, Boston and Lowell. Nos. 1-3, Vol. I, January-March, 1832.

The Medical Magazine. (monthly). Edited by A. L. Peirson, J. B. Flint, E. Bartlett and others. Boston. Three volumes, 1833-35.

Annals of Phrenology. (quarterly) Boston. 1833-35.

The Boston Thomsonian Manual and Lady's Companion. 1834-40; *The Bostonian Thomsonian Manual* from 1840-42. (Thomson died 1843.)

The Thomsonian Messenger. Edited by O. B. Lyman, (monthly) 1841-43. Norwich, Connecticut.

The Journal of the Medical Society of Maine. No. 1, Vol. I, January, 1834, Hallowell, Maine.

The Moral Reformer and Teacher on the Human Constitution. Edited monthly by Wm. A. Alcott, 1835-36; continued as *The Library of Health and Teacher on the Human Constitution.*

The Graham Journal of Health and Longevity. Designed to illustrate by facts, and sustain by reason and principles, the science of human life as taught by Sylvester Graham. (weekly) Edited by David Campbell, 1837-39. Boston. In January, 1840, merged in *The Library of Health and Teacher on the Human Constitution.*

The American Medical Almanac. Designed for the daily use of practicing physicians, etc., being also a pocket memorandum . . . and a general directory of the United States and the British provinces. By Jerome V. C. Smith. Boston. Two volumes, 1839-40.

The Mesmeric Magazine or Journal of Animal Magnetism. (monthly) R. H. Collyer. Boston. 1842.

The New England Quarterly Journal of Medicine and Surgery. Edited by Charles E. Ware and Samuel Parkman. Boston. July, 1842-June, 1843.

The Rhode Island Medical Reformer. A family journal for the preservation of health and longevity. Edited by B. Franklin Clark semi-monthly. Providence. 1843.

Boston Guide to Health, and Journal of Arts and Sciences. Edited by Dr. J. S. Spear semi-monthly. 1843-44.

The Green Mountain Spring. Devoted to discussion and information concerning the popular medical uses of water, etc. (monthly) Edited by D. Mack. Vol. 2 edited by Robert Wesselhoeft. Brattleboro, Vt. 1846-48.

The Monthly Miscellany and Journal of Health, first published in 1846; becoming in 1847 *The Practical Educator and Journal of Health;* in 1848 *The Journal of Health and Practical Educator;* in 1863 *The Monthly Union and Journal of Health and Education;* finally, in 1868 *The Guardian of Health.* Edited by W. M. Cornell. Boston.

The New England Medical Eclectic and Guide to Health, edited by Calvin Newton, Worcester, 1846-47, changing to *The New England Botanic, Medical and Surgical Journal*, published semi-monthly; in 1851 becoming the *Worcester Journal of Medicine.* January, 1852-December, 1856. In January, 1857, merged in the *College Journal of Medical Science*, Cincinnati. (Calvin Newton died on August 9, 1853, and was succeeded by H. G. Newton. F. H. Kelley edited vols. 9-10; R. O. Williams and A. J. Howe edited vol. 11.)

The New England Eclectic. W. C. George, editor. (monthly) Worcester. 1859.

American Annals of the Deaf and Dumb, (quarterly) by the instructors of the American Asylum. Hartford, 1847-61; Washington, 1868-88.

The Quarterly Homoeopathic Journal. Edited by A. C. Becker, J. Birnstill and B. DeGersdorf. 1849-50; 1852-54, Boston.

The Homoeopathic Advocate and Guide to Health. Edited monthly by D. White, Keene, N. H. 1851.

The Granite State Medical Revolutionist and Hygienic Advertiser. Published by J. M. Hawkes, Manchester, N. H. 1850.

The New Hampshire Journal of Medicine. Edited monthly by Edward H. Parker. August, 1850-December, 1858. Published at Concord 1850-55; at Manchester 1856-58. September, 1853, George H. Hubbard added as editor; 1854 Charles Bell added.

Annual Report of the Female Medical Education Society, and the New England Female Medical College. Boston. 1851-54.

Independent Medical Gazette. (weekly) Edited by A. Paige. Boston. 1851.

The Boston Domestic Journal of Medicine (monthly), B. F. Hatch, editor and proprietor. March, 1852-March, 1853.

The Medical World, a journal of universal medical science. Edited by Jerome V. C. Smith and E. S. Smith. (weekly) Boston. 1856-57.

The Hygeist. Devoted to the preservation and perfection of the human race by teaching the natural, organic, dietetic, intellectual, moral and social laws of man; with the causes of disease, crime and misery, their cure and prevention. Edited by Silas Brown and Wm. A. Alcott. (monthly) Boston. 1857.

The Maine Medical and Surgical Reporter (monthly). Edited by W. R. Richardson and R. W. Cummings. Portland. Vol. I. 1858-59.

Communications of the Rhode Island Medical Society, with an appendix containing the proceedings of the society, from 1859 to 1877. Providence. From 1877 continued as Transactions of the Rhode Island Medical Society.

The Franklin County Journal of Aural Surgery and Rational Medicine. Edited by Aaron Young, Farmington, Maine. Vol. I, No. 1. 1859.

How to Live and Breathe. Moses Brown, editor, (monthly.) Boston. 1860.

The Berkshire Medical Journal. Devoted to the interest of rational medicine. Edited by Wm. H. Thayer and R. Cresson Stiles monthly. Pittsfield. 1 vol. January to December, 1861.

The New England Medical Gazette. A monthly journal of homoeopathic medicine, surgery and the collateral sciences. Boston. 1866-1918.

The Journal of the Gynaecological Society of Boston. A monthly journal devoted to the advancement of the knowledge of the diseases of women. Edited by Winslow Lewis, H. R. Storer and George H. Bixby. Boston. 1869-1872.

The New England Eclectic Medical Journal. Edited by Eli G. Jones. Auburn, Maine, 1872. Enfield Centre, N. H., 1873.

The Physician. Editors: A. O'Leary and Mrs. H. B. O'Leary (monthly), New York and Boston. 1872-73.

The Laboratory. A monthly journal of the progress of chemistry, pharmacy, medicine, recreative science and the useful arts. James F. Babcock, editor. 1874-77.

Vermont Medical Journal (bi-monthly), J. M. Currier, Editor. Burlington. Nos. 1 and 2, Vol. I. 1874.

Health Notes. An anti-vaccination journal. Published by Dr. Alfred Booth (bi-monthly) Springfield, Mass. July 1875-October 1876.

The Quarterly Journal of Inebriety. Hartford. Vols. I-II. 1876-1906.

The Home Medical Journal. A monthly paper devoted to the interests of health and hygiene in American households. 1879. In April 1880 continued as *The Physician and Patient*, running to July.

The American Journal of Otology, edited by Clarence J. Blake and A. M. Mayer (quarterly). New York 1879-81; Boston 1882.

American Journal of Science. New Haven. 1880.

New England Medical Monthly, W. C. Wile, editor and proprietor. Newtown, Bridgeport, Danbury, Connecticut. 1881. In 1897 consolidated with *The Prescription.* In 1912 merged in *American Practitioner and News*, Louisville, forming *American Practitioner*, N. Y. In 1915 consolidated with *American Journal of Urology.*

The Massachusetts Eclectic Medical Journal. Devoted to medicine and general science. H. G. Barrows, editor (monthly), Boston. 1881-85. In June 1881, G. H. Merkel added as editor. In 1883 Robert A. Reid became editor. Continued as *The Massachusetts Medical Journal*, suspending publication in 1907.

Maine Medical Journal. Devoted to Eclecticism. Edited monthly by W. Wadsworth and A. J. Marston at Augusta, 1882-83. Continued in 1883 as *Eastern Medical Journal.* Edited by Marston 1883-87 in Worcester.

Abstract and New Books. A bi-monthly medical publication containing abstracts and items of interest for the active practitioner. H. H. Howe, M. D., Weston, Vt. October 1885-September 1887. Became monthly and continued as *The Abstract and Index*, until 1888.

Annals of Gynaecology. Edited by E. W. Cushing et al. Boston. 1887-89.

Boston Journal of Health, under the management of Dr. Frank (monthly). 1887-89.

The Monthly Bulletin. Designed to . . . present a record of the public health, mortality and meteorology of Rhode Island. Providence. 1888-1911.

The Prescription. 1899. In March, 1897, merged in the *New England Medical Monthly* and continued as *The New England Medical Monthly and The Prescription.*

Annals of Gynaecology and Pediatry. Philadelphia; Boston. 1890-1908. Continued as *Annals of Medical Practice.* Boston. 1909-1910. Merged in *New England Medical Monthly.*

Le Journal de la Société médico-chirurgicale canadienne-française de la Nouvelle-Angleterre. Lowell. 1891.

Journal of the Massachusetts Association of Boards of Health, 1891-1904, becoming *American Journal of Public Hygiene.* Boston; 1905-08, Columbus, Ohio; 1909-10. Since 1910 *Journal of the American Public Health Association*, Chicago.

The Rhode Island Medical Science Monthly. J. F. Haller. January, 1893-June 1894. Continued as *The Atlantic Medical Weekly.* Providence, 1895-98. In 1898 merged in *The Philadelphia Medical Journal.*

Yale Medical Journal. New Haven. 1894-1912.

Journal of the Maine Academy of Medicine and Science. 1894-

The Vermont Medical Monthly. Burlington. 1895-1914.

The Atlantic Medical Weekly. v 3-10, January 1895-October 1898. Rhode Island.

Journal of the Boston Society of Medical Sciences. Edited by Harold C. Ernst. 1896-1901; continued as the *Journal of Medical Research;* present editor F. B. Mallory.

The Journal of Mechanical Surgery. Boston. 1896.

The American Journal of Physiology. Boston. 1898-(current).

The Refractionist. A Journal of Practical Ophthalmology. Boston. 1894-97.

The Providence Medical Journal. 1900-10.

The American Journal of Orthopedic Surgery. Boston. 1903. In 1919 changed to *Journal of Orthopedic Surgery.* In 1921 became *Journal of Bone and Joint Surgery.* (current).

The Archives of Physiological Therapy. Boston. 1905-06. Continued as *Journal of Inebriety*, 1907-13, in consolidation with *The Quarterly Journal of Inebriety.*

The Journal of Abnormal Psychology. Boston. 1906-(current).

Journal of Therapeutics and Dietetics. Boston. 1906-14.

The Journal of the Maine Medical Association. 1910-(current).

Vermont Medicine. Published by the Vermont State Medical Society. Rutland. 1916-18; continued as the *Quarterly Bulletin.*

The Rhode Island Medical Journal. Owned and published by The Rhode Island Medical Society. Monthly. 1917-1918, resumed with v. 3, 1920-(current).

Journal of Industrial Hygiene. Boston. 1919-(current).

The Physiotherapy News Bulletin. Boston. 1923-(current).

EDITORS OF THE BOSTON MEDICAL AND SURGICAL JOURNAL

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THE SLEEPING SICKNESS REMEDY

SCIENCE informs us that the mystery of the composition of Bayer 205, the German remedy for sleeping sickness, is believed to have been solved by the French chemist, Fourneau, and his associates. The account of this work has been published in the Annales de l'Institut Pasteur. The name given to this compound is "309," the more accurate, if less simple, name of which is: "the urea of meta-aminobenzoyl-paramethyl - meta-aminobenzoyl-1-aminonapthalene-trisulphonate of sodium 4-6 8." Although absolute proof of its identity with the German drug has not yet been attained, it is known that it cures mice infected with the trypanosome of sleeping sickness.

Drug Eruptions*

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Eruptions on the skin from the absorption of drugs have of course been known for many years, but the introduction of new drugs with the advance of medicine makes continual additions to the list of drugs which can cause cutaneous manifestations. It seems advisable, therefore, from time to time to review these newer agents and their possible influence on the skin in order to be familiar with such effects. The most important reason, I believe, for missing the diagnosis in such eruptions is the failure to consider a drug as the possible etiological factor. These are often puzzling skin conditions and it is necessary to have in mind drugs as possible causes of certain unusual and baffling dermatoses. It is well, therefore, to remember always to ask the patient at least two questions: First, "What medicines have you been taking internally?" and secondly, "What have you been applying in the form of local applications?"

Before taking up some of the newer experimental work on drugs and some of the newer drugs I desire to refer briefly to drug eruptions in general. We can, perhaps, consider drug eruptions in general as occurring in sudden outbreaks, as being highly colored, and as having few constitutional symptoms, but we all know of many instances in which none of these facts are true. There is indeed a wide variation in the manifestations caused by the absorption of drugs and in many instances the appearance simulates some other inflammatory disease of the skin very closely. Careful study, and especially a careful history are often necessary to make the correct diagnosis. It is often true, too, that a first history, or a second, or even a third will fail to give the necessary information. Numerous cases are missed through failure to go farther than the patient's mere denial of having taken any medicine, although I do not mean to imply that this is always an intentional deceit on the patient's part.

This naturally brings up the question of differential diagnosis, which is an extremely large question, and I can only cite two or three examples of the problems which arise. It is hardly necessary perhaps to more than mention acne or folliculitis which occur from iodid or bromid and the necessity for differentiation from an ordinary acne in the young individual or from a folliculitis of industrial origin. Again, bromid eruptions simulate conditions found in verrucous tuberculosis and blastomycosis so that oftentimes an accurate history of these cases is of extreme importance. Various exanthemata versus drugs is another big question. It is extremely difficult at times to make a diagnosis in the morbiliform and scarlatiniform eruptions which occur so frequently in children and young adults. In fact, one authority goes so far as to say that usually one or the other of the two attacks of supposedly measles or scarlet fever is in reality a drug eruption. Then there are the purpuras, perhaps from iodid, etc., the herpetic eruptions and the keratoses from arsenic, the latter, of course, appearing a good many years after the arsenical medication. Then there are the urticarial lesions and pigmentations and the pruritus associated with a number of other drugs, to mention only a few of the common manifestations.

The mechanism by which these drugs act is not fully understood. We know that the increased elimination from the skin, perhaps by reason of defective organs of elimination, may be a factor, for the occurrence of bromid and iodid eruptions in individuals with poor heart and kidneys is a matter of clinical observation and perhaps accounts for the eruption to some extent.

Again, it is possible that the absorption of a drug gives rise to the formation of some substance which acts as a foreign protein and thus perhaps sensitizes the individual to the drug. We find certain anaphylactic phenomena associated with urticarial manifestations which help bear this out. The fact that certain of these eruptions can be overcome by starting with a small initial dose and gradually increasing the dose without causing an eruption lends a bit of evidence to this view. About all we can say on this subject is the fact that drug eruptions are favored by several factors: In the first place by an excess of cutaneous elimination for some reason or other; secondly, by imperfect elimination by reason of heart or kidney disease; thirdly, because of large doses; fourthly, by reason of long administration of a drug, perhaps only in small doses; and fifthly, by idiosyncrasy of the individual.

Idiosyncrasy, the most important of these, has been defined as an abnormal reaction to an amount of a given substance which would not produce disturbance in the great majority of individuals. This is an indefinite term, a definition, and does not in any way explain the mechanism to account for the particular condition. There is no doubt that accurate physiological and chemical studies of such cases will help to explain such phenomena. The work of Osborne[1] at the Mayo Clinic demonstrates the manner in which these problems are being attacked. He has demonstrated that there is an exchange of ions in the process of absorption of potassium iodid; that the potassium ion is replaced by the sodium ion largely. In potassium iodid given by mouth the iodid forms a sodium protein combination, but when sodium iodid is given very little iodid combines with the protein. However, in cases of iodism from sodium iodid, the iodid united with the protein fraction to a greater extent. While this work does not lead us to an actual explanation, still I believe it shows a step in advance towards a solution of such problems in a fundamental manner.

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*Read at a meeting of the Holyoke Medical Society, December 11, 1923.

Other experimental work has been done on this particular subject at Ann Arbor by Dr. Wile[2] and his associates. In their work with the bromids and iodids they found that the cutaneous sensitization tests for these substances are negative and therefore could not be used to indicate ingestion susceptibility. They also found that the percutaneous introduction of a foreign protein in the presence of a circulating blood containing iodid in one case at least showed lesions simulating those produced by bromid spontaneously. Such reaction is on a par with those performed with luetin in connection with the ingestion of iodids. They were not able to demonstrate any precipitins in the blood serum. They did not find anything that could explain this irritation on any simple bacterial or chemical grounds. The only conclusion arrived at was that it was probably a complex biochemical reaction. According to them it is not, however, a true sensitization in the same way that we have a food sensitization. But their work with the bromids did demonstrate that there was a ready substitution in the body fluids of chlorid by the bromid and it is possible that this might lead to a change in the reaction of the circulating blood and thus perhaps play a part in the production of bromid lesions. It occurred to them as a therapeutic measure to use salt solution intravenously in cases of bromid eruption. The results were quite striking. They found that there was a certain amount of shock almost immediately as a result of the injection, and also a rather sharp nephritis which gradually disappeared. This was probably due to the bromin in the urine which was found very promptly after the injection of the salt solution. Combined with this was a marked relief of the mental toxemia and a decided decrease and gradual disappearance of the cutaneous lesions. They used from 100 to 400 cc. of decinormal saline intravenously at three or four day intervals, for from two to five injections. They report as yet only a comparatively few cases but the work offers hope for speedy relief in the therapy of cutaneous and mental symptoms of bromid poisoning.

Phenolphthalein. This drug has been the subject of much investigation in recent years and numerous cases of eruption following its use have been reported. It is a widely used, widely advertised, harmless laxative, and is a constituent of over forty proprietary laxative preparations. The onset of the eruption may appear as early as twenty-four hours after the first dose, but usually appears after having taken it for some time. Brunettes seem to be more susceptible and the normally hyperpigmented areas seem to be the favored areas of eruption. The eruption consists of polychromatic plaques, varying in size and shape, widely scattered over the body. The color may vary from a bright pink to a deep purple and there usually remains a deep pigmentation of the areas which persists for a long time, months and possibly years, after the lesions have involuted. The individual lesions are slow in disappearing, are slightly scaly, and become active again with only a very small dose of the drug. In some of the cases there have been vesicles and superficial ulcers on the mucous membranes of the mouth and genitals. Cases of chronic urticaria and nasal herpes have also been reported from the use of this drug. The eruption produced in these cases is almost identical with that produced by antipyrin.

It has also been noted that certain of the "fixed" eruptions occurring after the use of arsphenamin are similar to these phenolphthalein cases. Of course it may be a question in some of these cases whether these patients have used phenolphthalein as part of their preparation for the arsphenamin injection. The application of phenolphthalein to the skin of susceptible individuals did not produce any reaction, but the ingestion of phenolphthalein would "light up' the old lesions.

Arsenic. The changes produced on the skin by this drug have long been recognized, namely, the keratoses, epitheliomas, and pigmentation of the body, and the hyperkeratotic condition of the palms and soles. These changes may appear many years after the administration of the arsenic so that it is necessary to be somewhat cautious in regard to its continuous use. It is widely used in chorea, anaemia, and in many skin diseases, especially psoriasis and eczema, all of which are long drawn out. The drug should therefore be given intermittently and only for the period of necessity. We see every year cases in which serious complications of previous arsenical medication are occurring, so that a word of caution in regard to its use seems advisable.

The newer arsenicals—the arsphenamins, neoarsphenamins, cacodylates, etc.—are also causing cutaneous disturbances, some of which are very serious indeed. These can perhaps be discussed best in two groups, the early and the late types, referring to the time elapsing after the administration of the drug. Perhaps they are better called the acute and chronic types. The acute type may appear within a few hours or one or two days after the injection. These are usually urticarial and erythematous in character and do not last long as a rule. There is also the type which is sharply localized to a certain area and flares up at each successive injection, the so-called "fixed type" of eruption. These are sharply defined, slightly elevated, smooth, pink to brown plaques which may leave some pigmentation.

The chronic type may appear after the fourth or fifth injection, or may appear after a period of several weeks or months. This eruption appears first usually on extensor surfaces of limbs as a macule or maculopapular eruption, and may spread to involve the whole body surface with intense and generalized exfoliation. There are all stages from a mild asymptomatic erythema to the severe generalized cases with fever, diarrhea, etc., perhaps with a fatal outcome. There may also appear the herpetic eruptions, zoster and simplex, and the lichenoid lesions, as well as occasional other manifestations on the skin. In addition there are being reported the types of eruption which have heretofore followed the use of the older kinds of arsenic, that is, the keratoses and pigmentation. It seems likely that more of these will appear as time goes on. Pigmentation from the use of silver salvarsan has been mentioned but I do not know of any authentic cases reported in this country. Moore and Keidel[3] of Baltimore have reported a series of thirty-one cases of reactions of this sort, and the Dermatological Section of the Mayo Clinic, under Dr. Stokes[4], has recently published a series of thirty-eight reactions which they have had following the use of salvarsans.

A careful study of these latter cases demonstrates a number of interesting sidelights on the cause and reasons for these eruptions. For example they show that the reactions have no clinically demonstrable connection with the administration of mercury. They are not dependent on any renal abnormality or injury, that is, there is no evidence of arsenic retention due to renal injury by mercury. Furthermore, the reaction is not necessarily caused by the amount of drug administered and the eruptions show a distinct tendency to occur early in the course of administration rather than late. They furthermore give some interesting observations on the so-called idiosyncrasy of these patients to arsphenamin. Stokes[4] found evidence that chronic focal infections or acute prodromal or intercurrent infections formed a part of the complex on which the cutaneous reaction developed, the severity of the reaction bearing some direct relation to the extent of the infection factor. Certain of their cases showed a serious or even fatal result associated with the rapid extension of a previously mild dermatitis following the stirring up of a focal infection, while in another case there was the immediate involution of a severe extending dermatitis on the total extirpation of a septic focus. Stokes feels sure that the matter of infection is an important part of the causative background of these eruptions complicating the administration of arsphenamin. With such evidence as this it is necessary, therefore, to be on the watch for such infections in our patients undergoing administration of arsphenamin and in cases of beginning eruption to search thoroughly the parts of the body where possible focal infections may exist.

In the treatment of these arsphenamin eruptions McBride and Dennie[5] have suggested the use of sodium thiosulphate on the basis of the fact that sulphur is known to precipitate arsenic, mercury, etc. The thiosulphate is selected because it is soluble and can be given in a concentrated solution. It is non-toxic in two-gram intravenous doses and it has a rather rapid chemical action. They have suggested from 0.3 gm. to 1.0 gm. daily intravenously, and by mouth as well. The results in their cases and in other cases, as well as in mercurial poisoning, have been extremely encouraging.

There are certain newer synthetic remedies, the use of which has been found to produce eruptions which simulate the exanthemata. These can perhaps be considered better in groups. The barbital group, consisting of diathybarbituric acid and salts, medinal, barbital, luminal, etc., produce morbiliform eruptions of bright red coloration, usually on the body. Occasionally other types of eruption have been produced.

There is another group of newer bromid preparations—adalin, bromural, etc. Cases of pruritus, urticaria, acne, and pustular eczematoid eruptions have been reported following their use. The feeling has been expressed that elderly people have been affected more by this group than younger ones.

Cincophen has produced scarlatiniform or erysipelatous eruptions, and occasionally urticarial or herpetic lesions. The newer antipyrin group of drugs—pyramidon, etc.—has shown patches and plaques similar to lesions caused by antipyrin itself. From acetylsalicylic acid, cases of urticaria, of swelling of the face and lids, associated with general malaise, have been reported.

In closing let me emphasize the fact again that the newer drugs, as well as the older ones, may cause skin eruptions and that the appearances on the skin may cover a wide range of manifestations. Both the symptoms and the appearance have much in common with other dermatoses. The history then oftentimes becomes an extremely important matter. The possibility of drugs must always be considered, for on the proper diagnosis in these cases depends to a great degree the prognosis and our treatment, for with the elimination of the causative factor and the application usually of mild soothing treatment the great majority of such cases convalesce rapidly.

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Osteomyelitis of the Ilium in Children

BY CARL BEARSE, M. D., BOSTON, MASS.

UNDER the above title the writer recently reported two illustrative cases together with a brief summary of this condition in general. At this time a detailed description of this disease is attempted, in an effort to more clearly define this affection from other conditions with which it may be confused.

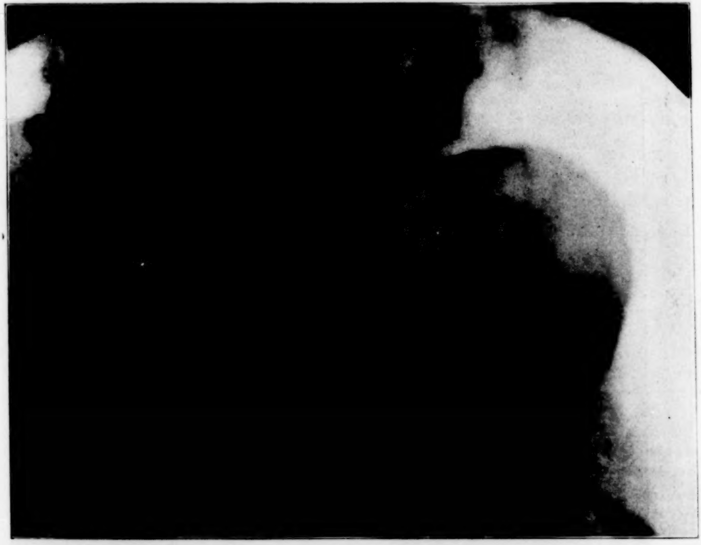

FIG. 1: Osteomyelitis of the Ilium, showing one small perforation near the sacro-iliac joint.

FREQUENCY

That this condition is not very common is evident from the fact that the largest single series of ilium infection ever compiled contained but 14 cases. Also, various investigators in considering osteomyelitis of all the bones found ilium infection to total but from 2 to 7 per cent, even though this bone condition did occur in 20 per cent of the flat bone infections. On the other hand when infection of the pelvic bones alone is considered it is the most frequent, being far more common than infection of all the other bones of the pelvic girdle combined.

ETIOLOGY

Trauma has been found to be a factor in a large percentage of these cases. While it is possible that trauma might have been a factor in all the cases, as children frequently fall and hurt themselves, it cannot be proven. Distant foci of infection have been found in others, and in still another group it has been shown to be metastatic, following an infection of another bone.

The organism most commonly found was Staphylococcus Aureus, although Pneumococcus, Streptococcus and Staphylococcus Albus have been isolated.

PATHOLOGY

In considering the pathology of this condition, the structure of the ilium should be borne in mind. The course of the disease differs from that in a long bone with a hollow shaft, due to its anatomical structure. The ilium is a flat bone, and flat bones are composed of two thin layers of compact tissue, enclosing between them a variable quantity of cancellous tissue. There is no general marrow cavity, but the spaces between the bone-spicules intercommunicate and contain marrow. It is evident, therefore, that in an infection of a flat bone due to the thin cortex, there is early perforation; as the disease progresses the perforation may increase in size, or a new perforation will appear nearby; in advanced cases there may be several perforations.

By X-ray this is evident at first by a punched out appearance or vacuole, and this may gradually increase so that in advanced cases it may take on a mottled appearance.

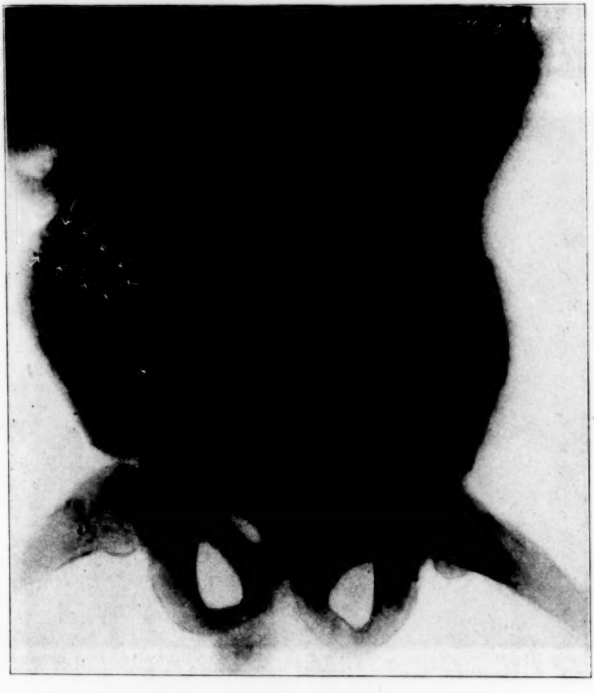

FIG. 2: Osteomyelitis of the Ilium, showing a large perforation at the iliac crest.

SYMPTOMS

The onset may be sudden or insidious, and the reaction may be mild or severe. The most prominent symptom is pain in the region of the hip, and with it there is usually fever, chills, vomiting, night cries, and tenderness over the affected area. The temperature may go to 104° or even higher, and the leucocyte count goes up correspondingly. Again, the reaction may be so severe that the picture is that of a general systemic reaction without any localizing features. On the other hand, the only symptom may be a slight limp. The point to be emphasized in this connection is that the symptoms are referable to the hip, and not to the ilium.

DIAGNOSIS

The diagnosis is often difficult because of the picture of general prostration. On physical examination in addition to the systemic reaction there is to be found in the vicinity of the involved hip, exquisite, localized tenderness over the ilium in acute cases. In the chronic case there is usually much less sensitiveness but a swelling is often present. The greatest point of tenderness is as a rule posterior to the great trochanter. The muscles of the buttock on the involved side may be spastic, the groin may feel tense, and local heat may be present. There may also be a fullness in that groin just below Poupart's ligament, as well as subcutaneous oedema with pitting on pressure. On attempted motion of that hip there are pain and spasm, but if one is careful motion can always be demonstrated.

In chronic cases the X-ray is a decided help, but in the acute case it may show nothing. The use of stereoscopic plates may help the X-ray localization of the infection. Once the disease process is shown by the X-ray, repeated views at appropriate intervals are exceedingly valuable in watching the course of the disease.

DIFFERENTIAL DIAGNOSIS

In some cases the systemic reaction is so considerable as to divert attention from the local condition. As the symptoms are centred largely about the hip, hip joint affections must be ruled out. A careful hip examination will disclose motion in that hip, which will demonstrate the process to be extra-articular. In early cases the localized tenderness will help to rule out other conditions, and in late cases the abscess formation over the ilium together with roentgen ray findings will aid the diagnosis.

Common errors that have been made in this condition have been to call it arthritis, sprain, abscess, meningitis, T. B. hip, scurvy, and malignant disease.

To emphasize how careful the physical examination must be, the writer knows of one case that was at first diagnosed as meningitis, and later T. B. hip before the correct diagnosis was made. Also of another case that was treated as carcinoma of the ilium for over a year before the true cause was suspected.

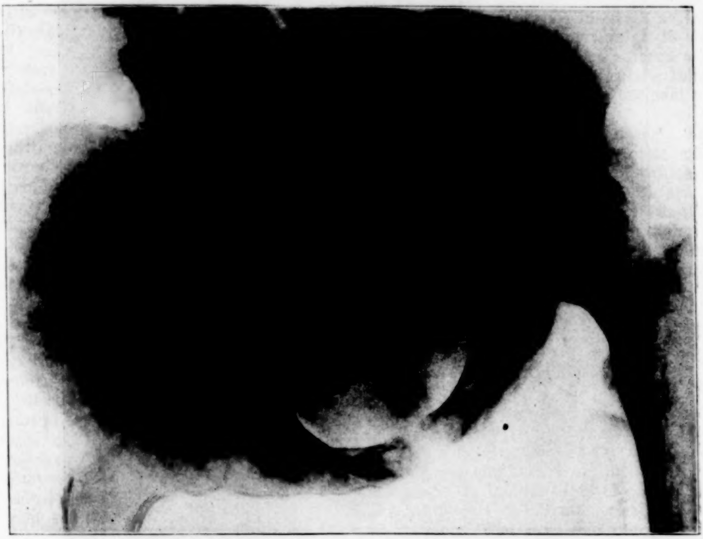

FIG. 3: Osteomyelitis of the Ilium, showing multiple perforations.

PROGNOSIS

Osteomyelitis in general is a serious condition, but in the ilium it is more grave because of its proximity to the hip joint and the peritoneal cavity. The institution of prompt treatment favors to a large degree the course of the disease. The prognosis also varies with the type of infection, the virulence of the organism, and the resistance of the patient.

COMPLICATIONS

In this disease complications are frequent. The most frequent is the pocketing of pus. Other complications that have been recorded are, metastatic infections in other bones, disarticulation of the hip due to extensive destruction, amyloid liver because of long continued suppuration, arthritis of the hip, erosion of the femoral artery which required ligation, and phlebitis of the iliac vein.

TREATMENT

The fact that there is a systemic reaction in this disease should not be lost sight of, and attention should be paid to the general hygiene, including fresh air, easily assimilated food, catharsis as indicated, water should be taken freely, and tonics prescribed as necessary.

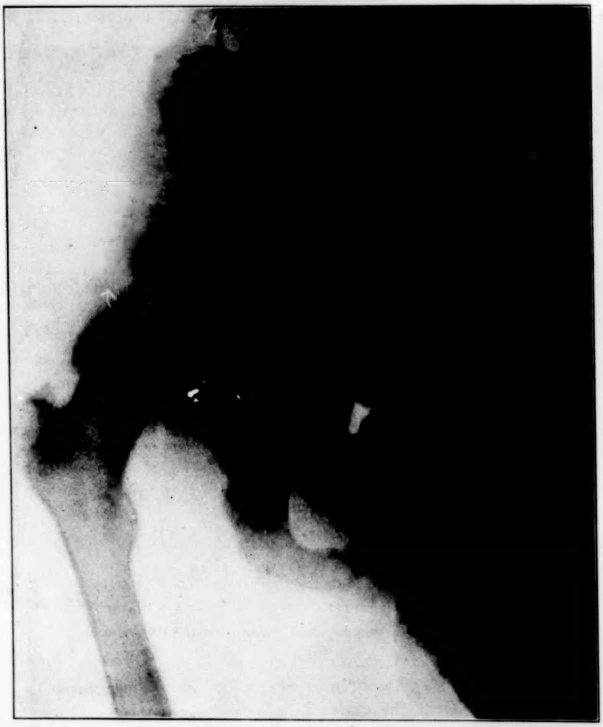

FIG. 4: Osteomyelitis of the Ilium, showing extensive destruction with dislocation of the femoral head.

The treatment of the local condition is based on general surgical principles, that of early operation, liberal drainage, and removal of sequestra. When a perforation is present that adequately drains the bone, incision and drainage of the abscess may be sufficient. With no perforation or unsatisfactory bone drainage, a trephine operation of the ilium is indicated. If the process is an extensive one with much bone destruction, then a partial or total resection of the ilium should be done, depending on the amount of the involvement.

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MEDICAL PROGRESS

Report of Progress In Orthopedic Surgery

BY M. N. SMITH-PETERSEN, M. D., BOSTON

[This report is based on the Twenty-first and Twenty-second Reports of Progress as published in the Archives of Surgery.]

CONGENITAL CONDITIONS

Congenital Dislocation of the Hip; Congenital Clubfoot.—In regard to these two conditions emphasis should be laid on early recognition, and early treatment. The sooner treatment is started, the more conservative are the methods required, and open operation may be avoided in the majority of cases. Tenotomies are not indicated in the treatment of clubfoot; they are potentially dangerous since they leave a weakened foot.

Disturbances in Epiphyses in Growth Period. Legg, Calvé, Perthes, Koehler or Osgood-Schlatter affections are discussed by Valentin[1] in an interesting paper. The author feels that these conditions are due to congenital anomalies, chiefly circulatory in character; there may be an endocrine influence as well, but this factor is of relatively less importance. The author calls attention to the fact that since Legg-Calvé-Perthes disease has been proven non-tuberculous, the prognosis of tuberculous hip disease has become relatively more grave; a large per cent of the so-called cured cases of tuberculous hip diseases are without doubt cases of Legg-Calvé-Perthes disease.

Spina Bifida. Keiller[2] writes an excellent paper reporting seven cases of this condition; he not only discusses the anatomy but reviews the entire subject. Delbet and Léri[3] report a case of enuresis with spina bifida occulta relieved by operative removal of a fibro-cartilaginous band which compressed the cauda equina. Hackenbroch[4], Hoelen[5], and Marie and Léri[6] report cases of the same condition.

TUBERCULOSIS

Tisdall and Harris[7] studying the relation between phosphate content of the blood and the deposition of bone in cases of surgical tuberculosis came to the conclusion that the latter does not depend upon an increase of the inorganic phosphate content. In many cases the phosphate concentration was below that of normal blood serum.

Trauma as an Etiologic Factor. The *Presse Médicale* gives a summary, written under the pseudonym of Sénèque[8], of an investigation which has recently been conducted in Switzerland of the old question of relation between traumatism and tuberculosis of the bones and joints. This is an important question from the medico-legal point of view, and the article covers the subject well. In this brief report it would be a mistake to attempt to abstract it. Von Meyenburg[9], Zollinger[10], and Pometta[11] write on the same subject. Von Meyenburg feels that trauma rarely causes tuberculosis of bones and joints; he emphasizes the importance of establishing the presence or absence of a pre-existing focus; he further states that the trauma should be of an appropriate nature, and should have been received in spinal and pelvic cases within a year, in other joints more recently. Pometta finds that most cases reported to the Swiss accident insurance institute as traumatic tuberculosis have been attributed to an event which could not really be considered a possible causal trauma. In other cases the tuberculous disease was already present in the part when the accident occurred.

Tuberculoprotein. Toeniessen[12] has employed for diagnostic purposes an extract of tubercle bacilli, rich in protein, which he calls tuberculoprotein. Its advantages are, its exact dosage, its perfect absorption, and the complete solution of the active substances which the human body does not have the power of extracting from the bodies of the tubercle bacilli. Friedrich[13] reports the experience of the surgical clinic at Erlangen with Toeniessen's tuberculoprotein; he considers it safer and surer than the old tuberculin.

SYPHILIS

Symmetrical Synovitis of the Knee in Congenital Syphilis (*Clutton's Joints*). Lane[14] contributes a good review of the literature on this subject and emphasizes as important diagnostic features: 1. Insiduous development. 2. Chronic course. 3. Symmetrical distribution. 4. Freedom from pain and the mobility of the joints to passive motion. 5. Association with other syphilitic stigmas. 6. Amenability to treatment. 7. The fact that in the roentgenogram the bones appear unaffected, the patella is markedly floating, and the articular space is widened. The average age in Lane's cases was 15 years. The ultimate result was perfect recovery of the joints under antisyphilitic treatment.

Charcot's Spine. Ridlon and Berkheiser[15], reviewing ten cases seen by one of the writers in fifty years of practice, thus summarize their findings: 1. Spinal arthropathies may occur in any portion of the spine, but in their experience have been confined to the lumbar vertebrae. 2. They are commonest in males, only one case in a female being met in their experience. 3. The ages varied from 32 to 68. 4. The average number of years between the initial infection and the occurrence of the arthropathy was eighteen years. 5. The onset was insidious, and was sometimes accentuated by traumatism. 6. The bony changes consist of bone destruction, bone proliferation and displacement, usually laterally. New bone deposits are abundant, and in their cases have been apparently attached to the vertebrae. They have seen none with bone plaques separated from the spine, such as are frequently seen in the knee, ankle, and other joints. 7. None of their cases had local pain or tenderness or showed signs of stiffness other than mechanical, resulting from bone destruction and bone deposits. 8. Bone changes in the spine frequently appear before any ataxic symptoms develop, but they may appear coincidentally with or subsequent to the recognition of the ataxia. 9. Of their ten cases, only one presented neuropathic changes, in other joints. 10. The pain, paresthesia, and paralysis which appear in the lower extremities in some of these cases seem to be mechanical, from bone pressure on the nerves at their exits. In some instances, these symptoms may be relieved by stretching the spine and correcting the deformity as far as possible, maintaining the correction by a corset or jacket.

RICKETS AND ALLIED DISORDERS

Etiology of Rickets. Mellanby[16] comes to the following conclusions: "When a child is well fed, the presence or absence of sunlight makes no difference to its health so far as rickets is concerned. 2. In the case of a child fed on mediocre, border-line diet, exposure of the skin to sunlight will probably prevent rickets. 3. In the case of badly fed children, that is, when diets contain much cereal and a deficiency of fat soluble vitamin, and calcium, sunlight will not prevent rickets, but may ameliorate the symptoms to some extent. Mellanby considers exercise, as well as sunlight, as of secondary importance to diet in the etiology of rickets.

A Summary of our Knowledge of Rickets. A recent editorial[17] discusses the problem of the cause of rickets, which it maintains is approaching solution, but it is admitted that the interplay of the various factors influencing the satisfactory deposition of calcium phosphate in the growing skeleton is still obscure. It has been shown that the following factors play a part in the etiology of rickets: 1. An organic factor in diet concerned with the calcification of bone; 2. light; and 3. an adequate amount of and correct balance in the diet of the salts of calcium and phosphorus.

PARALYTIC CONDITIONS

Poliomyelitis. Reconstruction problems make up the larger part of the literature on this subject during the past year. Stabilization of the foot is still an unsettled question though the study of end-results from different operative procedures is helping to decide what methods are successful. Whitman's astragalectomy undoubtedly stabilizes the foot and is a very useful operation in certain cases; Hoke's subastragaloid arthrodesis is coming more and more into favor; it is an anatomical reconstruction which stabilizes the foot in the lateral plane particularly. It may be used with tendon transplantations, converting malignant leverage into beneficial muscle power. Steindler[18] advises Pan-astragaloid Arthrodesis in cases of drop foot and dangle foot.

Tendon transplantations for stabilization of the foot are now generally in disfavor unless accompanied by some form of subastragaloid arthrodesis.

Surgical Reconstruction of the Paralytic Upper Extremity. Steindler[19] recognizes four major problems and four remedies. Problems: 1. The power of abducting the arm. 2. The flexion of the elbow. 3. The hyperextension of the wrist. 4. The closing and opening of the fingers, with abduction and adduction of the thumb. Remedies: 1. Arthrodesis of the shoulder. 2. Transplantation of the origin of the flexor muscles of the forearm to a point two inches higher up on the humerus. 3. Arthrodesis of the wrist. 4. Transplantation of half the flexor longus pollicis to the basal phalanx of the thumb.

SCOLIOSIS

Conservative treatment by plaster jackets and exercises remains the treatment in the so-called idiopathic cases of scoliosis. Both jackets and exercises vary in character, but fortunately the incapacitating, so-called corrective, jackets are only rarely encountered. Scoliosis resulting from poliomyelitis in selected cases is benefited by fusion operations. This method of treatment in some cases prevents increasing deformity, in others it improves the deformity.

INFLAMMATORY CONDITIONS

Arthritis. Fletcher[20] emphasizes the beneficial effect of dietetic treatment, particularly low carbohydrate diet. Smith[21] in a study of 100 cases of arthritis by x-ray followed by laparotomy in 60 cases has found an intestinal abnormality interfering with the function of the ascending colon. The cecum in these cases becomes a sac filled with excellent culture media for streptococci, and therefore an excellent focus of infection. He has brought about remarkable improvement by removal of the ascending colon, or by division of constricting bands. Taylor[22] likewise has found abnormalities of the colon in chronic arthritics, and has achieved good results by surgical interference.

Pemberton and co-workers[23] report the results of their study of the blood gases and the blood flow in cases of chronic arthritis.

Swaim[24] uses the classification of infectious, atrophic, and hypertrophic arthritis. He gives his reasons for this classification, and dwells on treatment based on the etiology of each type.

Ramel[25] is convinced that the gonococcus plays an important part in the production of spondylose rhizomélique.

Blaine[26] in a study of 1800 cases of low spondylitis found 18 cases in which the sacroiliac joints were involved. He describes the x-ray appearances from the early acute stage to the final stage of bony ankylosis.

Myositis Ossificans. Lewis[27] carefully describes two cases of circumscribed myositis ossificans developing in clean incised abdominal wounds. He does not, however, confine his report to these two cases, but discusses the etiology and also the differential diagnosis between this condition and periosteal sarcoma. Nutt[28] reports a case of myositis ossificans progressiva and gives a complete review of the literature.

OSTEOMYELITIS

Nussbaum[29] has demonstrated that the terminal arteries in the metaphysis admit emboli over 20 microns in diameter. This explains, he believes, why large bacterial masses can find lodgment here, while they do not remain in the arteries elsewhere in the bones. Bearse[30] calls attention to the fact that infection of the iliac bones is far from rare. Early diagnosis is difficult. It should always be kept in mind in a case of a painful hip which permits good but not normal range of motion. Levi[31] reports a case of osteomyelitis of the ilium originating in a septic arthritis of the sacroiliac joint.

STATICS OR BODY MECHANICS

Goldthwait[32] calls attention to the importance of correct furniture in schools, colleges, and industrial plants. He describes the types of chairs and desks which were constructed on the recomendation of medical committees for Smith College and Massachusetts Institute of Technology.

NEOPLASMS

Hirsch and Ingals[33] describe a rare neoplasm, the sacro~~coccygeal~~ chondroma. These tumors arising from the notochord are found to occur especially at the base of the skull and in the region of the sacrum. While practically all are reported malignant, the growth generally remains regional and remote metastases are infrequent.

Vascular Tumors of the Knee Capsule. Haas[34] records two cases of hemangioma of the knee joint. The differential diagnosis from tuberculosis may be difficult, but may be possible by the sign of Gangolphe and Saberaut. This sign is a marked difference in the circumference of the knee in the suspended and dependent positions.

Bloodgood[35] reports a case of pure myxoma of the astragalus with lung metastases. He recalls one other similar case. This seems fairly definite evidence, therefore, that this type of tumor is malignant. Bloodgood's[36] article on "A Brief Summary of the Salient Features in the Diagnosis and Treatment of Bone Lesions" is extremely helpful. It would be impossible to do it justice in this brief report; any one interested in bone conditions should read the original.

Osgood[37] reports three cases of multiple myeloma involving the spine. He points out the difficulty in differential diagnosis from tuberculosis.

TENDON, BONE, AND JOINT SURGERY

Page[38] describes an operation for the relief of obstinate flexion contractures of the forearm. He has employed it in six cases, three due to ulnar paralysis, one to ischemic paralysis, one to monoplegia, and one to hemiplegia. The principle of the operation is transplantation downward of the origin of the entire flexor group of muscles from the humerus and ulna. Ludington[39] reports a case of rupture of the long head of the biceps with complete recovery following suture to the short head of the biceps. The author also dwells on a new diagnostic test for this condition which may prove valuable. Phemister[40] reports two cases of cysts of the external semilunar cartilage of the knee, which he says are the first to be reported in this country. Delagenière publishes an enthusiastic report of the results of the osteoperiosteal bone grafts, and describes the technic of their application in cranio-plasty, pseudarthrosis, etc., his experience comprising nearly 300 cases.

PERIPHERAL NERVES

Lewis and Miller[42] contribute a noteworthy article on the subject of "Peripheral Nerve Injuries Associated with Fractures." They draw the following conclusions: 1. Nerve injuries are associated with fractures much more frequently than is supposed. They are frequently overlooked because of the hasty and incomplete examination of fractures. When fractures are examined, the possibility of a nerve injury should always be kept in mind. 2. The character of the injury varies greatly, from the slightest contusion, from which the patient rapidly recovers, to anatomic division and callus inclusion, which demand surgical interferences. 3. It is often impossible to differentiate by the most careful neurological examination between physiologic interruption of the nerve current and anatomic division of the nerve. 4. There is a tendency in these cases to wait too long for spontaneous recovery. 5. When recovery has not begun within three months after the injury, the injured nerve should be explored and the surgical procedure demanded by the pathologic findings be instituted. 6. Neurolysis is the operation which will be most frequently required. Resection of the humerus should no longer be performed in order to permit of end-to-end suture of the musculospiral nerve. Tendon transplantation should be performed in these cases. 7. The prognosis is very favorable in injuries of this type, because of the frequency with which the musculospiral nerve is injured and because of the relative infrequency with which it is divided, only neurolysis being necessary. 8. In the late ulnar nerve palsies, transposition of the nerve to the front of the elbow will be necessary in the cases of cubitus valgus. When bony outgrowths cause the paralysis, removal of such outgrowths and the placing of the nerve in a healthy bed may be all that is required.

FRACTURES AND DISLOCATIONS

Royal Whitman[43] writes on the diagnosis and treatment of incomplete epiphyseal fractures of the hip. From a therapeutic standpoint there are three classes of "slipped epiphyses": 1. Cases of slight deformity in which it is only necessary to fix the limb in an attitude of abduction for a time sufficient to permit repair; 2. Cases in which the deformity may be corrected by forcible manipulation; 3. Cases in which direct operation is necessary.

Cole[44] reports end results in 31 cases of fracture of the femur in children, 18 of which were treated by overhead traction. Good functional results were obtained. The author concludes that overhead traction will give better results than any other method of treatment of fractured femurs in children under ten years of age. Abbott[45] writes on "The Delbet Walking Plaster in the Treatment of Delayed Union in Fractures of Both Bones of the Leg." Its use has made it possible to avoid operations in a number of cases. The article gives exact details of the application of this useful plaster. Langdon[46] reports a case of separation of the epiphysis of the lesser trochanter by muscular violence. Treatment consists of immobilizing the hip in a plaster spica in position of right-angle flexion. Becker[47] recommends that operative treatment be employed in reducing fractures of the oscalcis, and describes his own method. Magnuson[48] describes the operation which he has employed to relieve disability in old fractures of the os calcis; it resembles that of Cotton.

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BOOK REVIEW

"Goiter." By F. DE QUERVAIN. Translated from the French by J. Snowman, M. D., M. R. C. P. New York: William Wood & Co., 1924.

To one interested in the thyroid subject, nothing could be more delightful than the perusal of this book. It is written by a master surgeon who has spent his surgical life in a goiter atmosphere. It is couched in simple language, arranged in an orderly manner, does not enter unnecessarily into the debatable and unsettled issues on the thyroid subject, yet covers thoroughly all aspects of goiter and associated thyroid disease.

The author demonstrates his intimate knowledge with American work on goiter and awards proper recognition to workers in the thyroid field in this country. His statement as to the diffuse adenomatosis, "We again reserve our opinion as to the function attributed to them by Goetsch," shows a close knowledge of our goiter literature and the discrimination of an experienced clinical observer.

The recommendation that the classification be anatomic and the statement, "Any biological classification would be premature at present, when our ideas on the subject are so rudimentary," meets with the whole hearted support of the reviewer. As does also the statement, "The normal function of the gland appears to us to be one single whole despite its numerous phases; and physiology is not yet in a position, on its own merits to distinguish the different elements which contribute to the totality of the function."

The author's views regarding X-Ray and radium correspond so closely with those of the reviewer that he cannot refrain from quoting them. "It is doubtful whether one can destroy thyroid tissue by sufficient application of X-Rays or radium emanation. This proceeding is always ill-advised, because we do not know the extent to which not only the diseased tissue, but the normal tissue which we want to preserve, is destroyed."

It is interesting to note the statement, "In Switzerland exophalmic goiter forms only about to 5 per cent of goiters among the indigenous population." In this community it represents 46 per cent of the operative cases.

So replete is this book with sound and practical knowledge obviously acquired by personal contact with the goiter subject, that the reviewer could continue quoting from it indefinitely.

No criticism of this book would be a just one without complimenting the translater for his accurate transposition of the author's thoughts into such precise and readable English.

Practical Chemical Analysis of Blood. By VICTOR C. MYERS. C. V. Mosby Co., St. Louis, Mo. $4.50.

The "Essentials of Pathological Chemistry" published eleven years ago and the first edition of the blood chemistry by Dr. Myers have been of great service to many students, practitioners and chemists. The accuracy and completeness of these books make them especially valuable. Such essential requirements continue to be apparent in the new work; for not only are all of the useful old methods described, but also several new methods—such as the calcium and phosphorus determinations—which have very recently appeared in the periodicals. In the main part of the book the methods for the determination of the various nitrogen derivatives, sugar, cholesterol, and many of the salts are given. A separate chapter is devoted to the carbon-dioxide tension, and another to Folin & Wu's system of blood analysis. A very valuable chapter is made up of the clinical use and interpretation of chemical blood tests; and in another the quantitative micro-methods of urine analysis are fully described. The appendix contains information about the use of colorimeters, a list of standard solutions and reagents, a logarithm table, atomic weights, and metric equivalents. And finally, a very comprehensive list of references is given at the end of each chapter.

It is a great pleasure to recommend a new edition of Dr. Myers Practical Chemical Analysis of Blood; for it contains very valuable and accurate information for students, practitioners and chemists.

Fighting Foes Too Small To See. By JOSEPH MCFARLAND, M. D., Sc. D., Professor of Pathology in the Medical Department of the University of Pennsylvania. Illustrated with 64 Engravings. 298 pages. Philadelphia: F. A. Davis Co., 1924.

Dr. McFarland tells us in his preface that this book had its beginnings in a series of four lectures given at the Wagner Institute of Science, Philadelphia. These lectures were to be couched in language for the laity, yet, "Scientific accuracy was not to be sacrificed to popularity."

How well Dr. McFarland has accomplished his difficult task, in this unusual book, the reader soon finds out. The author is a lover of medical history and weaves the interesting historical facts connected with bacteriology, in a true Garrisonian manner. The reviewer has seldom read a book that has given him so much pleasure. To write entertainingly for the populace, "So that he who runs may read," on such a subject, and still have the contents worthy of a general medical treatise on this subject, is an art indeed.

The book is profusely illustrated with well chosen engravings. There is a fine frontispiece of van Leeuwenhoek, the discoverer of bacteria.

Of particular interest is the section on the spontaneous generation of life, and the early experiments which disproved this theory.

The section on rabies is particularly interesting from the historical standpoint, the classic account of Pasteur's first patient, the boy, Joseph Meister, given by Vallery-Radot, being presented at length.

Another fascinating section is that dealing with the plague, and its history, with many quotations from Pepy's diary concerning the plague. The book closes with a very comprehensive article on sleeping sickness, profusely illustrated. The other subjects treated, always with the instructive historic background, are given the same delightful touch as those mentioned above.

After perusal of this volume the lay reader cannot fail to have an adequate knowledge of "The foes too small to see." For the physician interested in bacteriology and medical history, the book will give lasting pleasure as well as normal condition, superimposed on drawings of the abnormal, aid the reader in visualizing profit.

Diseases of the Rectum, Anus and Colon. By Samuel Gant, M. D., LL. D., Professor and Chief of the Department for Diseases of the Colon, Anus, and Rectum at the Broad St. Hospital, Graduate School of Medicine, New York City. Three octavo volumes, totalling 1616 pages with 1128 illustrations on 1085 figures and 10 insets in colors. Philadelphia and London: W. B. Saunders Co., 1923. Cloth, $25 net.

This series of books is an encyclopedia of all the diseases of the rectum, anus, and colon, whether primary or secondary. The author has done an enormous amount of excellent work in preparing it and it shows that he has had a very large experience.

In considering the embryology, anatomy, methods of examination, and treatment, the author has made use of innumerable diagrams, drawings, and photographs. Diagrams of the the pathological conditions. In the subject of anaesthesia the same method is used to show the locus and methods of injection, where regional or infiltration anaesthesia are used.

Throughout the volumes numerous instruments for use in diagnosis and treatment are described and illustrated. Many of these are inventions of the author. The text is accurately and thoroughly written.

Volume one deals first with the embryology and anatomy of the entire subject matter which follows. One entire chapter is devoted to anaesthesia, chiefly local anaesthesia. Another describes the methods of examination. Anorectal fistulae, hemorrhoids, and malformations in the anorectal region are treated in a very complete manner.

Volume two covers the pathological conditions of the rectum, both diseases of the ulcerative and tumor types. The causes of rectal hemorrhage, its treatment, and the subject of tumors of this region are adequately covered.

Volume three treats with diseases higher up in the gastro-intestinal tract. The author has given us excellent chapters on the parasitic diseases, diverticulitis, constipation, and intestinal obstruction. While this is not primarily a treatise on appendicitis, it seems that if it is to be considered at all, the subject deserves more than nine pages in an encyclopedia of 1600 pages.

Methods in Medicine. By G. R. Hermann. C. V. Mosby Co., St. Louis. $6.50.

This book is esentially a manual for the use of resident physicians and interns in a hospital. It is divided into five parts. The first portion describes the duties of the medical house staff, gives rules to be applied to various departments, outlines history taking and physical examinations, and takes into account routine laboratory methods. The second part describes the more elaborate laboratory procedures; and in the third part diets are considered. The application of drugs is taken up in part four, and in part five recording and graphic methods of charting and all standard sheets for this purpose.

Many of the large hospitals publish manuals and guides for the use of the medical staff, and these of course are peculiarly applicable to their needs. But many of them merely contain rules and regulations. Accordingly as "Methods in Medicine" is very comprehensive, contains complete references and a good index it should be a handy reference book for medical pupils and physicians taking post graduate courses in large hospitals.

A NEW DIPHTHERIA CIRCULAR

The New York State Department of Health has issued a special bulletin on the eradication of diphtheria which contains a brief but admirable statement of the present status of toxin-antitoxin immunization and the Schick test, the campaign at Auburn being described as a typical illustration of what may be accomplished.—*The Nation's Health.*

Case Records of the Massachusetts General Hospital

ANTE-MORTEM AND POST-MORTEM RECORDS AS USED IN WEEKLY CLINICO-PATHOLOGICAL EXERCISES

EDITED BY
RICHARD C. CABOT, M.D., AND HUGH CABOT, M.D.
F. M. PAINTER, ASSISTANT EDITOR

CASE 10211

A Nova Scotian butcher of forty-three* entered July 14, irrational. Practically no history could be obtained.

F. H. Good as far as learned.

Habits. He denied alcohol and venereal disease.

P. H. and P. I. He thought that he had trouble with his liver and that his bowels were out of order. At one time he gave the duration of his trouble as sixteen months, at another as six weeks.

P. E. A well nourished man with slow thick speech, markedly disoriented, with mild delusions. His movements were slow and incoordinate. He could not do the finger-to-nose test. He made no effort to eat, and when he was fed allowed the food to fall from his mouth. He was incontinent. The tongue protruded in median line. *Heart, lungs, abdomen* and *extremities* negative. Systolic *B. P.* 120-105. *Genitals.* Two darkly pigmented areas on the foreskin. *Reflexes.* Knee-jerks rather lively. *Pupils* equal, slightly dilated, reacted to light, rather sluggishly to accommodation. He evidently had some difficulty in seeing, as he could not count correctly the number of fingers held before him. When asked to concentrate his attention on anything he closed one eye as though he had double vision.

T. 99°-101.6°. *P.* 58-95. *R.* normal. *Urine.* Normal amount, sp. gr. 1.028-1.025, no albumin or sugar, rare leucocytes at one of three examinations. *Blood.* Hgb. 90%, leucocytes 18,000-6,000; polynuclear leucocytosis. *Neurological consultation.* "Pupils react very sluggishly. Clonus both sides. Probably syphilis of the central nervous system." *Eye consultation* July 14. "Optic neuritis both eyes. Both discs pushed forward three or four diopters. Edges indistinct. Vessels tortuous. A few hemorrhages about the discs. Choked discs."

July 19 the patient seemed somewhat more rational. He was given corrosive sublimate gr. 1/4, phenol gr. 1/4 and water minims xv intramuscularly in the gluteal region. July 29 the oculist found no improvement in the fundi since the previous examination. August 2 lumbar puncture showed 5 c.c. of clear water-like fluid under no increase of pressure. No white cells seen. Sediment showed a few fresh red blood corpuscles. Culture negative. Wassermann negative.

From the first of August the patient became more and more stuporous and irrational. Restraint was necessary.

August 4 he suddenly became cyanotic, his respirations became slow and stertorous and grew gradually weaker and shallower, the pulse became more rapid and weaker, and he died.

DISCUSSION

BY DR. RICHARD C. CABOT

NOTES ON THE HISTORY

We must warn ourselves at the outset that we are more than usually likely to fail in our diagnostic efforts when our first contact with the patient occurs after he has lost his power to communicate with us and has become irrational, as this patient is. When practically no history can be obtained, as in this case, we are deprived of more than half of our valuable evidence. Without physical examination we often would not even attempt a diagnosis. It is almost as rash to attempt one without history.

This is especially true in a man in the middle period of life, because at that age the diagnostic possibilities are so much more numerous than they are in early life or in old age. There are only two or three causes for a comatose and irrational state either in young people or in old people, but in middle life there are many more. What little is given us under the heading of past history here is useless to us. We begin therefore with the physical examination.

NOTES ON THE PHYSICAL EXAMINATION

The account of his speech, his mentality, his movements, his reflexes, tells us only that cerebral control is markedly diminished. But we get no hint as to the cause of this diminution. We get equally little help from the account of chest, abdomen, extremities, genitals, reflexes and pupils. No finger-posts pointing in any particular direction are to be seen. The same is true of the temperature, the urine and the blood, which are compatible with any serious disease but point to none.

Something a little more definite occurs for the first time when we reach the report of the neurological consultant, who found a double ankle clonus, pointing probably to some cerebral disease, and of the eye consultant, whose examination points towards an increase of intracranial pressure as the cause of the optic neuritis and the choked discs. The evidence thus far, therefore, points towards disease within the cranial cavity.

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*So given in the surgical record. In the medical and pathological records the age is variously given as thirty-nine and thirty-one.

Why the neurological consultant believed this disease to be syphilis I do not know. There is nothing whatever in the evidence accessible to us which points to any such conclusion. Nevertheless the treatment followed out is based upon such a conclusion. A little more evidence is given us on the second of August, two weeks after the patient was first seen, when we have the result of a lumbar puncture. The fact that this puncture was done at all indicates probably that those in charge of the patient did not believe that he had brain tumor, since such a puncture is always dangerous in that condition. That it apparently did him no harm is to a certain extent evidence against brain tumor. The examination of the puncture fluid rules out meningitis of any type. The rest of the history tells us nothing more, and the case remains in deep obscurity.

DIFFERENTIAL DIAGNOSIS

One can be tolerably certain, I think, that he did not die of uremia. The account of the urine and of the heart as well as the condition of the eye grounds and the history of the case under observation all are against uremia. Neither is there any evidence of any other toxemia such as that associated with cirrhosis of the liver, with acute yellow atrophy of the liver, with pellagra or with diabetes. It is true that a couple of spots of pigment were noted on the genitals, but that is not in itself significant.

Apparently then the disease is not merely a cerebral manifestation of some disease in another organ, but is a disease of the brain itself. What disease? Brain tumor, which was my first guess and which would produce many of the symptoms, seems to me in the end somewhat improbable, both from the absence of headache, vomiting, and paralysis, and also from the harmless results of lumbar puncture. Nevertheless I think it is quite conceivable that in spite of all this evidence brain tumor is actually present.

Brain syphilis, a diagnosis often made but almost never verified post-mortem, might mean in this case arterial degeneration such as in an older person would be by far the most probable diagnosis. Sclerosis and narrowing of a number of cerebral arteries with malnutrition or softening of the areas which they supply would account for most of this patient's symptoms, possibly for all, though I do not quite see why there should be double optic neuritis and choked discs.

Cerebral hemorrhage is possible but on the whole improbable. It can occur without paralysis, especially when it gets into the ventricles or occurs in the cerebellar or frontal regions. But at his age and with so gradual an onset of symptoms it seems rather improbable.

Of cerebral abscess there is no evidence. Dementia paralytica might produce a state of mind and body much like this, but does not so far as I know produce choked discs.

On the whole, arterial disease with or without softening seems to me the most plausible guess, though it is nothing better than a guess. Possibly syphilis may have favored this degeneration. Brain tumor, however, cannot be ruled out, and if the patient were younger would be the best guess.

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Cerebral tumor, not localized.
Cerebral hemorrhage.

DR. RICHARD C. CABOT'S DIAGNOSIS

Degeneration of cerebral arteries.
Syphilis?
Possibly brain tumor.

ANATOMICAL DIAGNOSIS

1. *Primary fatal lesion*

Glioma of the brain.

2. *Secondary or terminal lesions*

Hypertrophy and dilatation of the heart.
Hyperplasia of the spleen.

3. *Historical landmarks*

Defective closure of the foramen ovale.

NOTE BY DR. CABOT

The actual finding, which I did not rule out in my differential diagnosis but left as one of the less probable alternatives, makes it clear that not every brain tumor, even though it produces an increase of intracranial pressure, is made worse by lumbar puncture. Though the lumbar puncture preceded his death by only two days, the interval would probably have been considerably less if the puncture were responsible for his death.

I learn after this discussion that there is some doubt as to this man's age. Some of our records call him thirty-one. Had I known this I think my first guess would have remained—brain tumor.

Dr. Richardson: A well developed, fairly well nourished white man apparently thirty-one years of age.

Head. The meninges, vessels of Willis, sinuses and middle ears were negative. The brain weighed 1590 grams, large. The convolutions of the cerebral hemispheres fitted closely up against the dura and their outer surfaces were flattened. The flattening was a little more marked on the left. On section the cerebellum, medulla and pons were negative. But beginning in the region of the posterior portion of the aqueduct of Sylvius the normal markings of the tissue were lost and there was diffuse infiltration into the brain of grayish to grayish-red new-growth-like tissue which presented in places areas of reddish mottling. This infiltration extended into the corpus callosum, along the aqueduct of Sylvius and well into the region of the basal ganglia on each side, but more markedly so on the left. In the region of the basal ganglia the infiltration was more marked in the region of the thalami and the posterior portions of the lenticular nuclei. In the region of the lateral portion of the aqueduct of Sylvius the new growth constricted the aqueduct, and the lateral ventricles on each side were moderately dilated and contained a slight excess of thin pale clear fluid. The tumor tissue was not sharply marked off from the normal appearing brain tissue, but faded out rather indefinitely into it. The new growth was considered to be glioma of the brain.

The examination of the organs of the trunk showed nothing for record.

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CASE 10212

A four-year-old girl of foreign (Italian?) parentage entered March 11.

F. H. Her mother was blind and had had one miscarriage. Two other children were living and well.

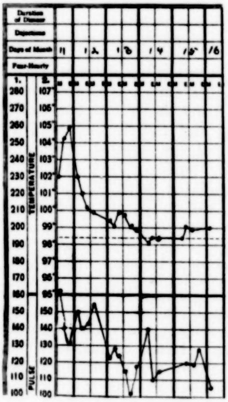
P. H. Except for occasional sore throats she had always been healthy and strong.

P. I. The night before admission the patient and her father were the only ones in the family to eat pigs' feet. These pigs' feet were purchased three days before and had lain on the outer window sill over two days. About ten o'clock that night the patient and the father were seized with attacks of vomiting, abdominal cramps and watery diarrhea.[*]

P. E. A fairly well developed and nourished child in profound prostration and with marked dehydration. Face flushed. Eyes sunken and cadaverous. Mucous membranes dry and parched. Teeth carious. Pyorrhea. Throat and tonsils markedly injected. Cervical glands slightly enlarged at the angles of the jaw. *Lungs* normal. *Heart* so rapid that the pulse was not obtained. Sounds tic-tac in quality. No enlargement or murmurs. *Abdomen* sunken, otherwise negative. *Extremities* and *reflexes* normal. *Pupils* dilated, unequal, regular. Reactions normal.

T. and *P.* as shown in the chart. *R.* 60-20. Amount of *urine* not recorded, sp. gr. 1.024, the slightest possible trace of albumin at one of two examinations, 2-3 leucocytes and 1-2 red blood cells per high power field at the first. ***Blood.*** Hgb. 50%, leucocytes 31,000-18,600, polynuclears 79%, reds 3,064,000, moderate achromia. *Wassermann.* Insufficient. ***Blood cultures.*** I and II. No growth. ***Stool*** negative.

Orders. March 11. Force fluids. Water (with half a dram of bicarbonate to ℥ iv of water) in small amounts. Orange juice and 5% glucose in same way. Discontinue orange juice and give only 5% glucose and water. Discontinue bicarbonate. Tonight give water as much as tolerated and alternate this with 5% glucose by mouth. Typhoid precautions. Tincture of deodorized opium 2 drops every three hours when awake. Saline ℥ xvii s.c. at 9 a. m. Glucose solution ℥ xv s.c. at 12 noon. Saline ℥ xi s.c. at 6 p. m. and ℥ xviii at 10 p. m. Brandy drops xxx glucose ℥ v, repeat this dose in three hours giving in small quantities and once again three hours later. March 12. Continue the above every three hours. Cream of wheat 2 tablespoonfuls. Malted milk ʒ i to water ℥ i poured over cereal. Later may have very dry thin toast with honey. March 13. Fluids—i. e., eggnogs, gruels, soups, cereals, junket, fat free milk. Toast and honey, but no butter.



The day of admission the patient received sixty-one ounces of fluid subcutaneously and about seventy-five ounces by mouth, making a total of 136 ounces in twenty-four hours. She had a violent diarrhea all day, checked by opium in the evening. The blood CO_2 was found to be 59. Later in the day and the following day she improved rapidly and seemed to be out of danger. It was believed the forcing of fluids saved her life. By March 14 she was entirely out of danger. The physical examination was negative. She made an uneventful recovery, and was discharged March 16.

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[*] The father was brought to the Emergency Ward with the child. He remained overnight, was given castor oil, also ¼ teaspoonful bismuth subnitrate every hour. He was discharged the next morning, well. Diagnosis, acute gastro-enteritis.

Discussion

BY DR. FRITZ B. TALBOT

This case was apparently a case of food poisoning associated with very marked vomiting and profuse watery diarrhea. The probabilities are that the pigs' feet eaten by the father and the child and not by any other member of the family are responsible for the upset.

The important feature illustrated by this case is the very rapid loss of fluid from the body and the failure to replace it because of the vomiting before the child entered the hospital. When she first arrived the dehydration and prostration were very marked, so marked indeed that it seemed probable that she could not last more than a few hours. The high fever of 105° and the very rapid pulse of 162 were both symptoms of the dehydration. In the new-born infant when sufficient fluid is not given "inanition" or "desiccation" fever results.

In this child the orders were to force fluids. The important feature of the case is the very large amount of fluid that was necessary before the body had absorbed enough to bring back the blood volume and the tissue volume of liquids to normal. During the first twenty-four hours under observation a trained nurse sat by the child constantly, and every few minutes a teaspoonful to a tablespoonful of water was given by mouth. This procedure is often very successful when larger amounts of water are followed by vomiting, apparently because they cannot be retained in the stomach long enough for absorption. During these twenty-four hours persistent nursing resulted in introducing seventy-five ounces of liquid by mouth. This amount alone was not sufficient, and it was necessary also to introduce fluid subcutaneously. This was done as follows: 9 a. m. normal saline ℥ 17, 12 noon 5% glucose solution ℥ 15, 6 p. m. normal saline ℥ 11, 10 p. m. normal saline ℥ 18. This fluid was absorbed very rapidly indeed from the subcutaneous tissue. It was not until a total of one hundred thirty-six ounces was introduced into the body that the obvious desiccation was overcome. At that time the temperature had fallen to about 99°, the pulse to about 120, the eyes were no longer sunken and had taken on their normal appearance; the flush disappeared from the face, the mucous membranes became moist, the tongue changed from a "beefsteak" glairy appearance to that of a normally moist tongue, the subcutaneous tissue no longer felt doughy, but had the normal flexibility.

It is important to bear in mind in such a case as this that under ordinary circumstances during health forty-eight ounces of liquid would have been introduced into the body in twenty-four hours. This was not accomplished prior to entrance into the hospital because she vomited persistently. Consequently there was a deficit of forty-eight ounces of liquid to commence with. Added to this there was a very profuse watery diarrhea. It is surprising to see how much liquid can be lost from the body in watery movements. I have taken the opportunity of occasionally measuring the twenty-four-hour amounts of such stools and have found that from a pint to a quart of liquid is not at all unusual. If this child lost a quart of liquid from the body, then the total loss of fluids would have been eighty ounces, and consequently when treatment was commenced there was a deficit of eighty ounces to be made up. Add to this 48 ounces more due to be taken in the second day of illness and it is seen that 128 ounces of fluid is needed to make up the fluid deficit. This explains why it was necessary to introduce one hundred thirty-six ounces before the body fluids were brought up to normal and before the desiccation was corrected.

In clinical practice this feature of treatment is very often overlooked and can only be controlled when the fluid intake is recorded and added up at the end of each twelve or twenty-four hours. Two cases stand out prominently in my experience which illustrate this point. One was a child with pneumonia who looked extremely sick and dried out. On being questioned the nurse said that he was receiving "plenty of liquid." Fortunately a record had been kept, and on adding up the amount of liquid taken during the previous twenty-four hours it was found that what was called "plenty" of liquid totaled to only three ounces. It was not surprising the child looked extremely ill. Careful instruction was given to give at least forty-eight ounces in the next twenty-four hours. This was done, and the whole clinical picture changed for the better. The child finally recovered. The second instance was a case of diarrhea with profuse stools. The family were unable to get in the required amount of liquid, and it was necessary to have a trained nurse take charge. This nurse, who had been trained to appreciate the importance of liquid, quite easily got in ninety ounces of liquid by mouth in twenty-four hours. This child also recovered.

Under normal circumstances forty-eight ounces is the average amount of liquid ingested during the day. It should always be borne in mind that a child needs these forty-eight ounces as a minimum even though he is sick. Added to that he needs more water because of his fever, and furthermore if there is diarrhea and loss of water or liquid through the bowels it must be made up. It is difficult if not impossible to obtain a clear picture of the fluid intake unless a carefully written record is kept of every bit of liquid introduced into the body, and good results are difficult to obtain unless the amount of liquid desired is got into the child. Appreciation of these facts often makes the difference between life and death of the patient.

At one stage of the illness in the present case the symptoms of dehydration simulated those of acidosis. The signs air hunger and cherry red lips were, however, absent. Small amounts of bicarbonate of soda had been given, unnecessarily, as it was proved later. Examination of the blood showed a high carbon dioxid combining power, which indicated the opposite of acidosis, that is, alkalosis. If more soda had been given and retained the child in all probability would have developed tetany. This case serves also to illustrate the possible danger of the indiscriminate use of alkalies in vomiting.

CLINICAL DIAGNOSIS

Acute food poisoning.
Alkalosis.
Dehydration.

CASE 10213

First entry. An American paper mill operative of forty-four came October 10, twenty-one years before his second admission, for treatment of necrosis of the metacarpal bones of the right hand following crushing of the second, third and fourth fingers in machinery six weeks before. The history and physical examination were negative except for the condition of the hand. After soaking the hand, scraping out the cavities, and washing with hydrogen peroxide for two weeks the patient was discharged relieved.

Second entry. July 18, twenty-one years later.

F. H. His first wife had four miscarriages, his second wife two.

P. H. His urine had occasionally been reddish for three years, with slight smarting and somewhat less free urination than formerly. For the past year his bowels had been constipated.

P. I. Fifteen years ago after hard straining he felt burning pain in the left lower quadrant. A physician gave him a truss for hernia. Nine years later a hernia came down on the right, due he thought to straining at stool. Since that time he had worn a double truss. He had always been able to reduce both herniae. For the past year he had had pain on the right and the hernia had slipped out past his truss.

P. E. Skin moist. Rash over trunk (heat?). Sclerae injected. *Heart, lungs,* and *abdomen* negative. *B. P.* 175/115. *Genitals* normal. Marked impulse and bulging of hernia on the right. Slight impulse on the left. Hydrocele on the right. A hard, painful mass the size of a peanut adjacent to the left testicle. *Rectal examination.* Hemorrhoidal tabs. Prostate moderately enlarged, firm. Left *pupil* greater than right. Reactions normal. *Reflexes.* Knee-jerks normal. Romberg, slight swaying.

Before operation *T.* and *R.* normal, *P.* 96-85; amount of *urine* not recorded, sp. gr. 1.022, findings negative; *blood* and *Wassermann* not recorded.

July 20 operation was done. The patient made a good recovery from ether. There was considerable swelling of the right scrotum, mostly post-operative edema, which still persisted August 3. August 9 he was discharged.

History of interval. For four months after leaving the hospital he felt well. Then he noticed a burning sensation in the left side in the region of the scar, and a physician told him that the hernia had reappeared and advised him to return to the hospital for another operation. This he kept postponing. He wore a truss and the hernia did not give much trouble. Three weeks before readmission he had several teeth removed, with considerable hemorrhage, requiring a suture. A week ago he fell. The hernia increased in size. It was reduced by a physician. He vomited three times within an hour of the accident, bloody vomitus each time, the largest amount of blood being at the third attack. The hernia had caused considerable pain for the past week, and on walking dropped into the scrotum. His bowels were always more or less constipated.

Third entry. February 14, six months after the last discharge.

P. E. Large recurrent hernia on the left, easily reduced. *Rectal examination.* Prostate negative.

Before operation *chart* normal, *urine* and *blood* not recorded.

February 15 operation was done. The patient had considerable trouble with gas for the next three days, relieved by enemata and rectal tube. There was a large hematoma and considerable induration about the wound. Upon removing the dressing the morning of February 22 a large amount of old blood clot exuded. It was allowed to run and a clean dry dressing was then put on. February 25 the patient was not in very good condition. The tongue was dry. Clot could still be expressed. The head of the bed was raised and he was put upon digitalis gr. iss t.i.d. Next day the wound was septic. The patient was incontinent. There were râles at both bases. He was given subpectorals. February 27 the leg was swollen. There was pus from the wound. That day he quietly died.

DISCUSSION

BY DR. EDWARD L. YOUNG, JR.

Operation was done, I assume, for the hernia. The question comes up here for indications and counterindications for doing a hernia operation in a man of sixty-five. Maurice Richardson used to say that fifty was an arbitrary dead-line, and after fifty one ought to have a very definite indication for doing an operation of election such as hernia. Here the hernia is painful and not well held. Those are indications. Things that have to be considered as potentially against it until proved to be right are (1) general condition; at his age this must be beyond question. Then he has some evidence of past syphilis. His first wife had four miscarriages, his second wife two. He has inequality of the pupils; the reactions however are normal. He has a slight Romberg. That would interfere, I think, not in the question of holding of the wound, but in the question whether or not he might have a certain amount of (2) tabetic involvement of the bladder so that there would be some constant straining. The other thing is whether or not he has any (3) prostatic enlargement with difficulty in urination. Because if he has the chances are his hernia will come down again. It is not uncommon that a constant source of straining such as an obstructing prostate will counteract the effect of the best hernia operation ever done. Of course at sixty-five the tissues may be such that without any obvious cause or any reason a well operated hernia will recur.

The only other thing here is the mention of "a hard mass adjacent to the left testicle." That is suggestive of an epididymitis coming from trouble in the prostate. If it was not sensitive it might well be a spermatocele, without any significance at all, or possibly syphilitic. At his age it ought not to be tuberculous without more symptoms.

I assume that the operation was for hernia. Of course the question of anesthetic at that age is fairly important. A general anesthetic carries a little more risk than local anesthesia; local carries more risk of local sepsis. An infiltrating anesthetic does damage to the tissues. I think without question a nerve-blocking anesthetic such as can be used for hernia has much less tendency towards damage to the tissues and resulting sepsis.

DR. YOUNG'S PRE-OPERATIVE DIAGNOSIS

Double inguinal hernia.

PRE-OPERATIVE DIAGNOSIS JULY TWENTIETH

Indirect inguinal hernia, reducible.

FIRST OPERATION

Gas and ether. Left side: Incision parallel to Poupart's. A long narrow sac with a small inlet containing an omental tab with gut at the proximal end, not adherent. Conjoined tendon not very well developed, therefore external oblique mesial ligaments sutured to Poupart's ligament beneath the cord.

Right side: A long sac without contents was isolated, tied off at the neck and excised. A large hydrocele of the scrotum was then freed and delivered into the wound, isolated and incised. The hydrocele sac was then everted around the testicle and sutured into place. External oblique was sutured to Poupart's ligament behind the cord.

FURTHER DISCUSSION

This was a radical operation for double inguinal hernia.

Miss Painter: It was done by two surgeons at the same time.

Dr. Young: Making the operation supposedly shorter than it otherwise would be. It was on the right side that he had the hydrocele, and operation for hydrocele always involves a certain amount of swelling, so that is not at all unusual.

It might well be that the hernia which had started to come back might have caught a loop of gut with a fall such as he had, and got pinched so that he could not reduce it and a physician had to, and that might well cause vomiting. But I do not see why he should have vomiting of blood from that alone. I do not think we can discuss it with any intelligence, because there is no suggestion of any other cause at all for it.

I assume that the second operation also was for the cure of this recurrent hernia on the left, and the same discussion applies to this that applied to it before, I think, and nothing more, and that is that if there was not any contraindication discovered in his general condition, or any cause for constant straining, and he wanted to take the slightly added risk at his age, there is no reason why it should not be done. The prostate is reported negative—at least I assume they paid attention to it,—so that presumably there was no contraindication for operation there.

DR. YOUNG'S PRE-OPERATIVE DIAGNOSIS

Left inguinal hernia, recurrent.

PRE-OPERATIVE DIAGNOSIS FEBRUARY FIFTEENTH

Left inguinal hernia, recurrent.

SECOND OPERATION

Local novocain. A large hernial sac was found extending from the internal ring to the upper part of the scrotum. The conjoined tendon was firmly attached to Poupart's ligament from the spine pubes up to the region of the epigastric artery. The hernia had recurred at the site of the internal ring and the sac lay to the outer side above the cord. Sac excised and wound closed by completing the suture of the conjoined tendon to Poupart's ligament and suturing of the remainder of the external oblique beneath the cord.

FURTHER DISCUSSION

From the evidence here he died of sepsis locally and in the chest. I do not think in looking back over it that there was anything that could have been done differently. It is a case where the patient was given the chance of being able to get along comfortably without a truss, without the risk of strangulation, and something went wrong; sepsis and death resulted.

DR. BETH VINCENT: The operation was done under local anesthesia with adrenalin, and such precautions were taken to check hemorrhage as we always have to take in these cases. But we did have a large hematoma between the skin and the external oblique which was released by removing sutures before there was any sepsis. The hematoma became septic in the course of the convalescence and the other septic condition—phlebitis—followed, I think, from the septic focus in the groin.

DR. YOUNG: Do you like adrenalin? Don't you think there is apt to be a back kick in bladders? In general do you like local for hernias?

DR. VINCENT: When we have an indication for this kind of anesthesia.

DR. LINCOLN DAVIS: I should like to ask if the first operation for hernia was on our service. I can remember when I was a house officer here Dr. Maurice Richardson was very strong on the age of sixty's being the limit for operating on hernia. If we use local that limit can be extended, and fairly safely on the whole. But of course each case has to be judged on its merits.

DR. YOUNG: Just at the minute I feel rather strongly on the subject. I have known several that did go septic, and think now I should say the proportion of hernias done under local that went septic was away above that done under general.

DR. DAVIS: I have recently looked up about 1500 cases. The occurrence of sepsis was higher in the cases of local anesthesia, but not so much as one would have thought. It was distinctly higher, but not twice as high.

DR. YOUNG: Of course at this age there is also local lowered resistance to a certain extent.

DR. E. J. OTTENHEIMER: Don't you think that sacral anesthesia gives a better prognosis?

DR. YOUNG: That won't hit the ilio-inguinal and iliohypogastric nerves.

DR. OTTENHEIMER: We do it and get it up by the amount of fluid we put in. One can strip up the dura by putting in large quantities of fluid.

DR. YOUNG: I don't know enough about sacral anesthesia to have an opinion about that.

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Left inguinal hernia, recurrent.
Bronchopneumonia.
Phlebitis of left femoral vein.
Pulmonary embolus.

DR. EDWARD L. YOUNG'S DIAGNOSIS

Left inguinal hernia, recurrent.
Bronchopneumonia.
Septicemia.

ANATOMICAL DIAGNOSIS

1. *Primary fatal lesion*

(Left inguinal hernia, recurrent.)

2. *Secondary or terminal lesions*

Operation wound.
Septicemia, streptococcus hemolyticus.
Thrombophlebitis of left femoral vein.
Pulmonary embolism.
Edema of lungs.
Slight hypertrophy and dilatation of the heart.
Congestion of liver, spleen and kidneys.

3. *Historical landmarks*

Slight arteriosclerosis.
Slight chronic pleuritis, right.

DR. RICHARDSON: On the left side along Poupart's ligament there was a linear wound fifteen cm. long, partly closed with sutures. In the region of the upper end there was a small collection of purulent material. There was some infiltration of the margins of the wound in that region. The skin of the scrotum showed large purplish areas. There were purplish areas along the margins of the wound. There was an old linear scar in the right lower quadrant.

The left lower extremity was swollen and pitted on pressure, and the skin showed discoloration in places. The subcutaneous tissues beneath the areas of discoloration mentioned showed marked infiltration with blood-like material.

There were a few old adhesions in the right pleural cavity. The lungs showed some hemorrhagic edema in the region of the lower lobes.

The heart was slightly enlarged—427 grams—with a good myocardium and valves. The aorta showed a slight amount of fibrosis above the diaphragm, and there was considerable in the abdominal portion, with intermingling areas of fibrous and fibrocalcareous change. In short, a certain amount of arteriosclerosis.

The pulmonary artery was occluded by a frank branching, coiled embolic mass,—pulmonary embolus. The upper end of the left femoral vein was occluded by a frank adhering thrombotic mass, the upper margins of which were irregular and broken as though a piece had come off from it.

The liver was large, but other than for showing some congestion was negative. Of course with the blocking of the blood stream in the pulmonary artery there is usually some congestion in the liver, spleen, etc. The spleen was considerably enlarged, 545 grams. There was some congestion and in addition the increase associated with the septicemia, streptococcus hemolyticus, which was present.

The lateral lobes of the prostate were slightly enlarged and in the situation of the so-called middle lobe was a small mass about seven mm. by 4 mm. in dimensions. It produced no definite obstruction.

Dr. Young: Was that a definite ante-mortem pulmonary embolus? Was he cyanotic to anybody's notice before that? The diagnosis is stated in the clinical record sent in. I wondered how they made the diagnosis.

Dr. Richardson: It was a classical picture of pulmonary embolism with thrombophlebitis of the left femoral vein.

Dr. William D. Smith: I thought there were always signs of shock and distress with a pulmonary embolus of any size. Do we frequently get it without?

Dr. Young: I have always believed that there was evidence of something of that sort. The reason I asked about cyanosis was because Dr. Cabot and I had a discussion whether it could ever occur without cyanosis to a considerable degree. I believed I had seen it without and he believed that cyanosis had to be present. They made the diagnosis here. I wonder on what symptoms they made it.

Dr. Ottenheimer: According to the record nothing sudden happened. It says, "quietly died."

Dr. Young: I don't think we shall know.

MEDICAL HISTORY

SMALLPOX AT THE COURT OF LOUIS XV, AND IN THE FAMILY OF MARIE ANTOINETTE

WILLIAM PEARCE COUES

In Smythe's work "The Guardian of Marie Antoinette," (letters from de Mercy—Argentau, Austrian Ambassador to Marie Thérèse of Austria), is given a graphic description of this scourge of the times.

"The horror of this widely diffused disease was increased in France by the absence of cleanliness, ventilation and elementary medical knowledge. In that country in the year 1754, the death rate from smallpox was one in ten, no doubt due to the custom for all the friends of a patient to visit him during the early stages of the disease. Inoculation was in its infancy, and its unpopularity was increased by its being considered merely an Austrian fad. Even when Louis XV's pestelential ending had filled all Paris with horror, when the malignance of infection from that one sick room had resulted in death to those who passed near its passages, and all recognized that their only safety lay in flight from the Œil-de-bœuf, yet the inoculation of the Dauphin, the Comte de Provence and the Comte d'Artois, which followed that horrible death of their grandfather, was regarded by the generality of Frenchmen as a wicked and rash action, due merely to the desire of Marie Antoinette to enforce an Austrian whim. Louis XV himself had, however, long been interested in inoculation, and a letter of Joseph II to his Majesty is extant, in which the Emperor dwells upon its manifest advantages, saying, "Why was not this discovered before? I should still have a wife, the happiness of my existence"; and another, a little childish letter, from Louis great-grandchild, Joseph's only daughter, the little Archduchess Thérèse, whose inoculation had been cause of great anxiety to Louis XV. The child writes: *'Knowing that you love me dear grandpapa, I assure you that I am marvellously well. Je n'ai que cinquante boutons qui me fait grand plaisir.'*

"Both royal families had reason to dread the disease and in Marie Antoinette's remembrance, still clear and vivid, was the death of the second wife of her brother, Joseph II, carried off in a few days by smallpox; and the last embrace of her own sister, Josèphe, who on the eve of her departure for her marriage with the King of Naples, was commanded by Marie Thérèse to pray first beside the coffin of her dead sister in law. The young Archduchess, feeling this command her death warrant, said goodbye to her little sister Antoinette with tears, saying their parting was not for Naples but forever, went down into the fatal vault and prayed as she was bidden, and died in a few days from the disease. Her younger sister, Marie Caroline, took her place upon the throne of Naples in 1758."

The credulity and ignorance of the *noblesse* concerning disease at this time was almost unbelievable.

Horace Walpole, visiting Paris, writes to the Countess of Ossory that he spoke to a well known *grande dame* of the court, concerning his gout, she replied that she knew of an infallible remedy for this, and that if he only would save the parings of his nails, placing them in a tumbler of water, the gout would never trouble him again.

Should the misguided campaigns against vaccination now being waged prove successful we may look for a repetition of the gruesome scenes above depicted, even in this supposedly enlightened age.

Harvard Medical Society.—Meeting in the Peter Bent Brigham Hospital Amphitheatre was held Tuesday evening, May 20, 1924, at 8.15 o'clock. Program: "The Use of Conditioned Reflexes for Analysis of Cerebral Functions," Dr. G. V. Anrep of University College, London.

CURRENT LITERATURE

ABSTRACTORS

Gerardo M. Balboni
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William H. Shedden
Warren R. Sisson
John B. Swift, Jr.
George G. Smith
Wilder Tileston
Henry R. Viets
Bryant D. Wetherell

Surgical Significance of Certain Abnormalities of the Urinary Tract

Lowsley, O. S., Kingery, L. B., and Clarke, H. C. (*Jour. of Urology*, Mar., 1924). Congenital abnormalities of the kidney and ureter occur frequently, as shown by their presence in 62 cases out of 4215 consecutive autopsies performed by Clarke. The patients with abnormally developed kidneys usually suffer from some pathological condition in this kidney when seen by the urologist. The opposite normally developed kidney is usually healthy. Congenital abnormalities are discovered only by careful cystoscopic examination, including routine pyelography, or by operation. The partial withdrawal of the catheter while making the pyelogram facilitates their discovery in many instances. The histories of 10 cases found among approximately 800 cystoscopic examinations here reported, show that congenital malformation occurs frequently enough to be of importance to the urologist. [B. D. W.]

Ectopic Opening of the Ureter in the Male with Report of a Case

Day, Robert V. (*Jour. of Urology*, Mar., 1924). Ectopic openings of the ureter are rare. In the female, 51 cases of extravesical opening of the ureter have been reported in the literature. In the male, ureteral opening into the posterior urethra or seminal tract has been reported 34 times in the literature available, 22 times in the posterior urethra and 12 times in the genital tract. In the female cases, recognition is comparatively easy and more than half the cases were operated on. In the male cases, all but 2 were discovered at autopsy and those 2 at operation. Doubtless such anomalies in both sexes are considerably more common than reports indicate. A case is reported in detail, followed by a brief resume of cases reported from 1835 to the present date. [B. D. W.]

Tumors of the Kidney Pelvis and Ureter

Thomas, G. J., and Regnier, E. A. (*Jour. of Urology*, March, 1924). Tumors of the kidney pelvis and ureter are not as rare as frequently reported. 253 reports were collected, five were personal cases. The diagnosis of the condition is frequently missed. The average age was 48 years; 62 per cent were males and 38 per cent females; 53 per cent occurred on the right side and 35 per cent on the left. They were bilateral in 4 per cent and multiple in 23 per cent.

The etiology of these tumors is not known. About 5 per cent of the renal pelvic tumors are associated with renal stones; 67 per cent are definitely malignant; all are potentially malignant. Their structure is similar to that found in tumors of the bladder. The symptoms are hematuria, 83 per cent; pain, 27 per cent; tumor, 24 per cent; and loss of strength and weight in 23 per cent. The diagnosis is made from history, pyelography, cystoscopy, urinary findings and by exploration. Treatment consists of complete early surgical removal. [B. D. W.]

A Study of the Pelves of the Double Kidney

Mertz, H. O. (*Jour. of Urology*, March, 1924). The author gives a short interesting discussion concerning double kidney with its duplicated ureter; followed by many plates of very clear interesting pyelograms demonstrating this condition and cuts of pathological sections. [B. D. W.]

The Use of Beef-Bone, Intramedullary Pegs in the Fracture of Long Bones

Davison, C., and Christopher, F. (*Surgery, Gynecology & Obstetrics*, April, 1924). These two authors present an experimental study and draw the following conclusions:

1. That the part of the boiled beef-bone peg which remains in aseptic stable contact with the endosteum of its host, surrounded by living bone, becomes solidly embedded in new bone. The peg undergoes gradual absorption and is replaced by new living bone which, later, in turn, is absorbed.
2. That part of the beef bone which lies between the fragments, but not protected by endosteum and not covered by living bone, even with aseptic surroundings, undergoes rapid absorption and disintegration and is not replaced by new living bone.
3. When one end of the beef-bone peg is not fixed in stable contact with the endosteum, but remains in position, there is absorption of both the peg and the surrounding live bone.
4. The internal callus, when the mechanical fixation holds and is aseptic, is limited by the beef-bone peg and does not bridge the line of fracture. The external callus is markedly lessened. The permanent or definitive callus is inhibited.
5. This series of experiments did not produce a single successful anatomical and functional result.
6. The causes of failure were:
    - *a.* Infection. Infections were very frequent and usually fatal.
    - *b.* Disengagement of the peg, due to:
        1. Failure in the mechanical reduction,
        2. Lack of continued immobilization,
        3. Loosening of the repair by absorption of the peg and surrounding live bone.
    - *c.* Disintegration of the peg from absorption at the line of fracture. A repair, apparently mechanically perfect, would show a good result as long as the peg remained strong enough to sustain the bone. When disintegration of the peg occurred at the line of fracture, a point of mobility would be found.

The end-results were either permanent non-union or lateral union usually in malposition. [E. H. R.]

Ventral Tumors of the Sacrum

Hundling, H. W. (*Surgery, Gynecology & Obstetrics*, April, 1924). Hundling presents a very thorough article on this rather rarely written about subject. He presents some beautiful pathological pictures, and a summary which is as follows:

Ventral tumors of the sacrum (so-called Middeldorpf tumors) are definitely encapsulated, are usually attached to the periosteum, and tend to erode the bone. The greatest pressure is exerted on the neural, and not on the rectal side.

Remains of the lower neural canal and the post-anal gut appear to form the basis for many of the ventral tumors.

There is a great diversity of tissue in these growths; all the body tissues may be represented.

Opinion seems about equally divided with regard to the monogerminal and bigerminal theories of origin of these tumors.

Ventral tumors of the sacrum seldom metastasize, but cause death by infiltration.

The blood picture is practically always normal, and the urine rarely shows unusual changes. Systemic reaction of the tumors is mild.

Pain, resembling sciatica, and constipation are often the only symptoms.

The roentgen-ray findings are practically always negative.

Treatment consists of the removal or scraping out of the tumor, followed by extensive radium radiation.

Five patients with ependymal cell glioma were operated on at the Mayo Clinic. The average age of the patients was 46 years. One patient was perfectly well 10 years after operation, and 1 showed improvement 19 months after operation, but complained of disturbance of function of the bladder and bowels. One died of recurrence nine years after removal of the growth. An exploration was made in 1 case, which proved inoperable, and the patient died 14 months later of intestinal obstruction. One had a recurrence 2 years after operation, but without discomfort.

Dermoids were removed in four instances. The average age of the patients was 30 years. Postoperative data were obtainable in three of these. Two patients were well, one, 1 year after operation, and one, 8 years after operation. One patient had a recurrence 5 years after the removal of the tumor.

There were three patients with foreign body giant cell tumors. The average age of the patients was 40 years. One patient was apparently well 15 months after removal of the growth. Almost complete recovery was reported by another, 10 years after operation. A third patient died following operation.

Carcinomata were found in two instances. One patient, age 40, had an adenocarcinoma, and was practically well 2 years after operation. One, age 49, had a colloid carcinoma and was markedly improved after its removal.

Myomata were removed in 2 cases. One patient, age 37, was improved 3 years after operation, and one, age 56, died from recurrence 1 year after operation.

One patient, age 64, with a myosarcoma, died from recurrence 1 year after operation.

One patient, age 19, died from recurrence 15 months after the removal of a sarcoma. The growth was composed of foreign body giant cells with mitoses. One patient had an inoperable basal cell epithelioma. [E. H. R.]

A Biophysical Law Governing Surgical Mortality

Crile, G. W. (*Surgery, Gynecology & Obstetrics*, April, 1924). Crile presents a rather unique and characteristic, interesting thesis as the Murphy oration delivered before the Clinical Congress of Surgeons of North America, and his article may be summed up as follows:

Although the electro-chemical theory interprets well the normal and the pathological phenomena of man and animals; although the numerous predictions based upon this theory were established by the more exact methods of physics; although it has furnished a plausible suggestion as to the line of evolution from the atom to man; although the theory has stood the crucial test of the surgical clinic by providing a scheme of management which has produced the shockless operation—the theory is not yet proven, and will not be proven until the equivalent of a living cell is constructed; until the equivalent of life is artificially made. Nevertheless, from previously accepted facts, from clinical observations, and from the evidence of experimental researches in our laboratory of biophysics we conclude:

1. That electric phenomena are co-existent with living phenomena because electricity is detected in every living plant or animal and is absent in the dead;
2. That electricity is manifested in every act of the living and is probably the so-called "spark of life";
3. That there are great numbers of different kinds of electric circuits in animals;
4. That the source of electricity in the cells is oxidation;
5. That oxidation in the cells of the organism is initiated and governed by electricity;
6. That electricity is accumulated on the lipoid films of the trillions of cells;
7. That each of the trillions of cells is a diminutive electro-chemical unit;
8. That during life there is a difference of potential, a state of unbalance within the organism;
9. That death is equilibrium of potential;
10. That there is a universal pattern of the living in the form of bipolarism;
11. That in the non-living no less than the living exists the universal pattern of bipolarism;
12. That the pattern of bipolarism runs in continuity from atom to man;
13. That man is an electro-chemical mechanism, a giant amoeba climbing up the slippery banks of time. [E. H. R.]

Chronic Duodenal Stenosis

McKenty, J. (*Surgery, Gynecology & Obstetrics*, April, 1924). This author describes this condition showing its analogy in the lower animal and its embryological development, and draws the following conclusions:

1. The position of the distal portion of the duodenum behind the root of the mesentery is not well suited to either the erect or dorsal posture.
2. As a consequence of compression at this point, duodenal stasis, of degree sufficient to give rise to symptoms, results and constitutes a definite clinico-pathological entity, of more common occurrence that symptom-producing nephroptosis.
3. The drag upon the mesentery of the small intestines by a loose caecum prolapsed into the pelvis is, by far, the most common cause. This drag can usually be determined at operation by the test described above; it may also result from adhesions of the mesentery to structures in the pelvis. Gastroptosis is probably only a minor factor.
4. Suspension of caecum, ascending colon and hepatic flexure adequately meets the indications and gives satisfactory results in the great majority of cases.
5. Duodenojejunostomy should be restricted to the more extreme cases of dilatation and to those in which the cause of the mesenteric compression cannot be discovered and removed. In my practice, it is being performed much less frequently than formerly, as the comparatively minor suspension operation has proven satisfactory. [E. H. R.]

Hydatid Cysts of the Spleen

Mills, H. W. (*Surgery, Gynecology & Obstetrics*, April, 1924). Mills presents a very interesting article based on the report of four cases. Hydatid cyst of the spleen is a very rare condition and, strangely enough, it is much more rare in the countries where the taenia echinococcus is most prevalent. The author reports in brief fifty cases from the literature, and appends a very excellent bibliography of five pages. [E. H. R.]

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THE NEW ANTI-PNEUMOCOCCUS SERA

SINCE the acceptance by this JOURNAL of the article on the "Isolation and Concentration of the Specific Antibodies of Anti-Pneumococcus Sera" by Dr. Lloyd D. Felton, the work on which this article was based has been discussed in the public press in a manner which appears to the Editors unfortunate, and seems to them as inevitably creating misleading impressions concerning its significance. It seems proper, therefore, to express in this issue our editorial appraisal of an interesting and painstaking investigation, which cannot help but lose by exaggerated exploitation. It will be easiest to do this by briefly reviewing the general state of our knowledge concerning the concentration of antibodies.

The desirability of injecting the useful protective substances, whether antitoxic or antibacterial, in as small a bulk as possible and with as little of the inactive protein of the horse serum as practicable, has long been recognized, and it is of course well known to all physicians that such concentration has long been usefully employed in connection with the antitoxic sera. A very considerable amount of work, both theoretical and practical, has been done, especially in connection with diphtheria antitoxin, and all of it has pointed to the association of the effective antitoxic substances with the globulins of the sera. The obvious desirability of concentrating the antibodies in anti-pneumococcus serum has been in the minds of investigators of the serum treatment of this disease from the beginning—particularly desirable in this disease because of the considerable amounts of immune serum that must be administered if success is to be obtained. Thus, in the early investigations of Cole and his associates at the Rockefeller Hospital, a study was made of the concentration of anti-pneumococcus antibodies by Avery[1], which was published in the *Journal of Experimental Medicine,* in which it was shown that the protective antibodies were precipitated with the globulins of the Serum. Avery used a number of methods of globulin precipitation, among which were the fractional saturation with ammonium sulphate, dilution and saturation with carbon dioxide and dialysis. Indeed, the association of antibodies in pneumococcus serum as well as in other immune sera with globulins has been a generally accepted fact, and the difficulty has been largely in determining whether it was the so-called euglobulin or the pseudo-globulin fraction which brought them down in the highest concentration. Thus in studies by Pick, as early as 1902[2] it was reported that in the serum of immunized horses diphtheria antitoxin is associated with the pseudo-globulins, while in similarly immunized goats it is present in the euglobulin. The antibacterial antibodies and the agglutinins in immune cholera serum were found in the euglobulin fraction of both goats and horses, while typhoid agglutinins were found in the pseudo-globulins of horses, but in the euglobulins of immunized goats, rabbits and guinea pigs. We might cite a further considerable number of investigations dealing with this subject merely to indicate the well established association of antibodies in general with the globulins. In spite of Avery's success in a considerable concentration, the method was not put to clinical use. Cole refers to their method as well, in Monograph 7 of the Rockefeller Institute, and comments upon the difficulties of making either of the two methods practically useful.

Gay and Chickering had also attempted a concentration of pneumococcus antibodies by a different method, namely, the addition of a water-clear extract of pneumococci to homologous anti-serum. The resultant voluminous precipitate they claim carried down with it the totality of the protective antibodies against pneumococcus infection in animals.

A method in principle similar to that of Gay and Chickering, has been that of Huntoon, which has been extensively tried of recent years in a number of clinics. It, also, consists of an attempt to specifically precipitate the antibodies from the serum. In Huntoon's experiments he uses washed pneumococci, with the subsequent dissociation of the antibodies from the bacteria. Concerning the usefulness of these antibody solutions of Huntoon, although they have been subjected to practical tests for several years, there is still a considerable amount of difference of opinion.

In view of all this, the work of Felton is important because it represents a renewed attempt to concentrate the active constituents of anti-pneumococcus serum by a simpler method of precipitation, and, from the laboratory point of view, perhaps the most significant part of his results is his statement that the materials precipitated, which he regards as containing most of the protective substances, have an iso-electric point at or about PH 6.8, which he speaks of as the iso-electric point of his antibody. This is in harmony with the results reported last year by Ruppel, Ornstein and Lasch[4] who, in studies on similar concentrations of antibody from serum by the methods of electro-osmosis, state the iso-electric point of the euglobulins at or about 6.4. It would appear from this that what Felton has precipitated are the euglobulins.

We regard this study as an interesting and painstaking one which may perhaps revive interest in the concentration of antibodies in various immune sera by methods of globulin precipitation, and thereby contribute considerably to further investigation of specific therapy in pneumonia. Only comparative experimental studies can determine whether the concentration in percentage efficiency of Felton's globulin precipitates exceeds those of Avery and others.

Its practical significance in the treatment of pneumonia has not been sufficiently tested to justify even a preliminary opinion. There are few diseases in which so much caution is necessary in judging therapeutic results as in pneumonia, not only because of the considerable individual differences between cases, but also because of apparent variations with seasons and from year to year in severity and death rate. It may be suitable to point out that, although the Type I pneumococcus serum has been in extensive use in the United States and parts of Europe since 1917, and was subjected to a great deal of well controlled investigation during the war, there are still differences of opinion among clinicians concerning the effectiveness of this treatment, even when very large amounts of the serum are employed. It stands to reason, however, that any of the many methods of concentration which have been advocated, and of which Felton's is one of the simplest, by which proportionate amounts of protective substances with relatively diminished volume and horse serum proteins could be injected would have the advantages of at least the same effects as unconcentrated serum, with relatively diminished chances of serum sickness.

Thus, in commenting upon the work of Felton as published in our last issue we wish to state that we considered, and still consider it as an interesting and painstaking, and therefore valuable study, and that we deplore for his sake, as well as for that of the subject with which it deals, the extravagant notices that have appeared in the public press concerning it.

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1 Avery, O. T.: Jour. Exp. Med., 1915, 21.
2 Pick, Bietr. z. Chem. Phys. u. Path., 1902, I, 351.
3 Monograph of the Rock Inst., 7, Oct. 16, 1917.
4 Jour. Exp. Med., 1915, 21, 389.
5 Zeitschre. f. Hygiene, 1923, 97, 188.

PHOTOTHERAPY

At a time when the people of ancient Egypt had become burdened with a multitude of gods and an exacting priesthood, a Pharaoh, Amenhotep IV, tried to overthrow these numerous divinities and their priests and to introduce the Sun-god Ra, as the one and only true God.

It has been said that this Pharaoh's heresy was due in an indirect way to the counsel of Moses. Possibly the Pharaoh did not see his way clear to introduce the Hebrew God even if he himself believed him to be the one and only god, but, being converted to monotheism he took for the symbol of his god the Sun in which he, as Man before him, saw most clearly the hand of a superior power. The Sun being already a God, Ra, or Aten, the others were publicly disgraced and Aten was set up in their places.

Undoubtedly this was not the first time that the influence of sunlight had been invoked as a curative agent for the ills of humanity, but the therapeutic practice was not of long duration. It will be remembered that Amenhotep IV died without a son and was succeeded by one son-in-law and then another—the now much talked about King Tutenkhaton. King "Tut" was unable to practice his cult. He was forced by priestly opposition to return to the worship of the old gods and he was obli~~ged to chan~~ge even his name—inserting Amon in place of Aten.

It was about this time that the Hebrews were "delivered" from their alleged bondage although as reported in a recent paper, according to Mr. Howard Carter (discoverer of King Tut's tomb) they were not "delivered" but were expelled from Egypt and the doctrine of monotheism and the practice of heliotherapy were declared illegal in Egypt.

Mr. Berry's improvements in the methods of making transparent quartz bids fair to initiate a new revival of interest in the beneficial effects of light—this time more especially in the therapeutic value of ultra-violet radiation. Such a revival will be the more lasting the freer it is from emotional hysteria. An indiscriminate use of radio-therapy is quite certain to lead again to its overthrow as a curative agent—but it is sure to come back in the future as it has done in the past.

The practice of heliotherapy was revived by the Greeks and the Romans, who believed that it had beneficial effects on their health, and although medical science as we know it today had not begun to develop in those early times we rather fancy that they knew more about the therapeutic value of sunlight than we give them credit for.

One of the first serious experimenters upon the therapeutic uses of light was Lobel, who in 1813 claimed to have successfully treated a disease of the eye (Amourse) by concentrated light. Lobel was of the opinion that the sunlight exerted a chemical influence. From this time until 1858 no particular progress was made in this branch of medical science, and its development really began with early experiments on the electric arc.

In 1858 Charcot reported the experiences of two chemists who were using an electric arc for vitrifying certain materials. The electric current was obtained from a Bunsen pile of twenty elements. The experiment lasted one and one-half hours. The experimenters were 50 cm. from the arc, and experienced no change in temperature, but their eyes pained them so severely the following evening and night that they were unable to sleep. The next day they had a painful erythema of the skin. Charcot cites other cases of electric light burn caused by an arc from a battery of 600 Bunsen elements. He concluded that the erythema was due to the chemical action of the light, and not due to the heat.

Upon the establishment of the germ theory of disease attention was directed to the discovery of disinfecting agents. The disinfecting action of light was thoroughly studied by Downs and Blunt in 1878. They investigated carefully the relation between wave length and disinfecting power and established the fact that the disinfecting action of light increased with decreasing wave length.

They studied the action of light rays on a great many kinds of bacteria in pure cultures—they also studied the protective influence of the culture media and they set this important subject upon a firm foundation.

All of Downs' and Blunt's experiments have been repeated and confirmed many times usually by investigators who had not taken the trouble to familiarize themselves with the literature on the subject, and even to this day some experimenters are continuing to repeat experiments the outcome of which could be accurately predicted by a cursory perusal of the voluminous literature on the subject.

If the investigators who devote their time to such simple experiments as radiating cultures of bacteria would spend a few hours in the library, consulting especially the volumes of the Transactions of the Royal Society and other publications from 1878 to the present day, they would save themselves much labor and expense.

Many able investigators contributed to our knowledge of the biological effects of rays in the years following the work of Downs and Blunt.

The use of red cloths as a popular remedy in Variola was mentioned as early as the 5th century A. D. That there is some relation between suppuration and the suppuration fever and light has been a popular notion in Roumania, Japan, China and other countries.

At the close of the 19th century, Niels Finsen, a practicing physician, became interested in the alleged influence of light on small pox patients.

His experiments were remarkably well planned. He concluded that small pox patients must be protected from the chemical rays of the light with as much care as the photographer protects his plates and paper. Neither electric light nor any brilliant illuminant must be used. The globes and lamp glasses should be a very pure dark red.

Some subsequent investigators have been unable to repeat Finsen's experiments, but in general it must be said that their investigations were not as well planned nor as carefully carried out as were Finsen's. As the result of these investigations Finsen established his "negative phototherapy."

He then turned his attention to the influence of light in the treatment of tuberculosis. He gathered together a group of investigators, made a very careful and critical survey of the literature and outlined a campaign of experimental procedure which extended over a period of years. Controversal points in the literature were cleared up by experiments better planned than those of his predecessors and very important advances were made in our knowledge of phototherapy. The results of these investigations were published in the Mitteilungen of the Institute. The comprehensiveness of the investigations is revealed by a survey of this publication. For example:

> Action of light on the skin:—Sunburn prevented by ray filters which stop the ultra-violet rays, but not those which hold back the longer light waves.
>
> Bactericidal action:—Probably all light waves have some bactericidal effect, but the ultra-violet rays are the most effective.
>
> Many different species of bacteria have been tested, and it has been found that some are far more resistant to light than others.
>
> In many cases a light which is too weak to kill bacteria can attenuate them. And in many cases it can attenuate or destroy the toxins produced by them. On the other hand, it may also destroy or weaken antitoxins.
>
> Some of the effects of light are evidently due to

> oxidation, and can be produced only in presence of oxygen.
>
> Sunlight, the carbon arc light, the quartz mercury vapor light and light from other sources have been compared; their spectral composition has been accurately determined; their bactericidal effects, their effects in causing dermal erythema and in curing diseases have been compared in a large number of investigations.
>
> The absorption of the various rays by the skin and by other tissues, including the blood, has been measured. It has been found that concentrated electric light, thrown upon the skin, can produce a considerable bactericidal effect to a depth of 1.5 mm. and a weakened effect to a depth of 4 mm.
>
> In 1904 Finsen wrote a report on his first 800 cases of Lupus vulgaris, showing that many were cured by treatment with light.
>
> The effects of light upon metabolism, growth, reproduction, pigment-formation and other physiological processes have been studied in many investigations.
>
> Organisms and organic substances which in themselves are unaffected by light may be "sensitized" by means of fluorescent dye-stuffs so that the light affects them or even kills them. Probably every organism, including man, can be killed in this manner.
>
> Several diseases of animals are due to sensitization of this sort, the best known being buck-wheat poisoning. It is possible that some diseases of human beings also are due to sensitization to light, as small-pox and pellagra.
>
> Light exerts a curative influence upon diseases. This is unquestionably true of tuberculosis, as shown by a long series of studies. The question as to how the light produces the curative effect has been much studied, but a definite answer has not been reached.

For these investigations Finsen received the Nobel Prize in 1903. With the premium received, he founded a hospital devoted to phototherapy. At first he relied upon sunlight for his treatments but because of its uncertainty and the excessive pigmentation which followed its use he resorted to artificial light sources. He developed a powerful carbon arc and had Heraeus construct for him the first quartz mercury vapor lamp.

Finsen sent lecturers to various countries in Europe and to the United States to explain the principles on which his new "positive therapy" depended. Unfortunately, few medical men take the time to inform themselves concerning these and consequently their clinical procedure is not properly directed. Nevertheless there was a revival of interest in phototherapy but the enthusiasm far exceeded the care taken in conducting the experiments. Naturally, therefore, interest in the subject waned in a few years and little progressive experimentation has been done since.

It is to be hoped that in the present awakening of interest in phototherapy investigators will take pains to familiarize themselves with the literature on the subject so that this therapeutic agent, which is undoubtedly of much value, will be established in a substantial and permanent place in clinical procedure.

THE ACTION OF ALCOHOL

Few laymen who claim to be well informed would say that from the physiological standpoint the chief effects of alcohol are on the nervous system. But the subject of alcohol in medical and lay circles is one which frequently gives rise to the most heated discussion as medical men themselves are not wholly agreed on certain phases of the alcohol question. However it may be stated without the slightest hesitation that alcohol does not hold the place in the estimation of medical men it formerly held, and it is now regarded more from the aspect of cold scientific facts. On the other hand, in recent years the truth concerning alcohol has been so greatly obscured by the declamations of its opponents, that a strictly impartial scientific statement on its physiological action is to be welcomed. Such a statement has just emanated from the British Medical Research Council and is the result of a complete revision undertaken by the committee of physiologists, neurologists, pharmacologists and chemists re-appointed by them. For many years it had been the desire of those principally engaged in public health work as well as of social reformers and others to secure an impartial scientific statement on alcohol couched in popular language, which might form a basis or starting point for any consideration of the subject. It is somewhat curious that up to 1916 comparatively few researches had been made on the question and therefore the first edition of this little book published in 1918 led the way in giving to the public a scientific exposition of the effect of alcohol on the human organism. The present edition thoroughly revised is a valuable document and leaves one dominant impression on the reader, that the effect of alcohol on the average individual is to remove in varying degrees the normal mental control of thoughts and actions which he habitually exercises. Fundamentally, this is the fact which accounts for most of the effects of alcohol as men of science know them and for the greater part of the popular ideas and fallacies connected with its use and abuse. Of course it is well known now to almost everyone that its action is narcotizing and not stimulating, diminishing the control of the intellect and will, the higher mental functions being first affected. Another fact well known to the medical man is pointed out, that its value as a fuel and as a substitute for carbohydrates in the diet is of theoretical rather than of practical importance. But it is impressed upon the reader that the main action of alcohol is excited on the nervous system and all the symptoms of drunkenness are due essentially to the action of alcohol on the brain and the rest of the nervous system. Even when it kills by acute poisoning it kills through its action on that system, and not by directly injuring any other bodily organ. Alcohol has certain therapeutic effects, but no scientific ground has been discovered for any claim made on behalf of alcohol to practical value as a direct stimulant of the heart in cases of threatened failure of the heart. It probably acts simply by virtue of its instant action on the mucous membrane of the mouth and throat. Direct effect on the heart only observed with large doses and then depressant. Its effects in moderate doses on the digestive organs are not appreciably harmful. But what is one man's meat is another man's poison and so with alcohol, a form of it which will not noticeably interfere with the digestion of one man will do so with that of another. After prolonged exposure to cold and when the body has become chilled and the deep temperature has been lowered, when once the patient has been subjected to warmth by means of hot blankets and hot bottles, the administration of alcohol can assist the restorative measures by promoting the return of blood to the superficial tissues. As with other drugs so with alcohol it is impossible to draw any hard and fast line between drug action and poison action. Drug action, when, with increase of dose, it becomes excessive, passes into poison action. Statistics are given which clearly demonstrate that the number of deaths directly or indirectly attributable to alcohol has no observable relation to the number of cases of certifiable insanity as a whole. The part which alcoholic excess plays in the causation of the ordinary forms of mental disease is of secondary importance, intemperance is more usually a symptom of insanity than its cause. Alcohol in excess has a deleterious action on the reproductive glands and Stockard has shown in experiments on guinea pigs that parental alcoholism may react injuriously on the vitality and normal development of the offspring.

The known therapeutic uses of alcohol may be summarized as follows:—1. Its main value is due to its narcotic action, by which it allays excitement and distress, and induces rest and comfort and thereby often ameliorates other symptoms indirectly; 2. Its limited food value may become important in association with its narcotic action, under conditions in which ordinary nourishment cannot be taken; 3. By diverting blood from the internal organs to the surface it has an adjuvant action to the application of external warmth in warding off or abating the effects of the common infection known as a chill. On the contrary the use of alcohol, in excess of the strictest moderation, definitely weakens the power of resistance to an infection such as that of influenza or pneumonia. As for the influence of alcohol on longevity evidence goes to show that it is not favorable to long life taken moderately. The use of alcohol as an aid to work is physiologically unsound. On the whole, this book on alcohol is against its use for the healthy, although allowing that, in strict moderation, some of its effects may be of value. However, it certainly is in no way necessary for healthy life. It is definitely injurious for children or for persons of an unstable nervous system. It possesses a certain value as a drug, especially when a narcotic action is desired, but its therapeutic effects are not such as to render its use essential in any condition. The economic effects and social aids of the consumption of alcohol are outside the province of a scientific discussion of the question. It may be said that the work of the British Committee on alcohol embodied in this book is the most valuable contribution to the subject up to the present. It seems to exactly define the situation as regards alcohol. No conclusions are made without the full support of scientific evidence and the case for and against alcohol is advanced with conspicuous fairness. It may be said that the "againsts" have it.

DOCTOR GEORGE HENRY SIMMONS

INVITATIONS have been issued to many physicians, educators and scientists to attend a complimentary banquet to Dr. George Henry Simmons on Monday, June ninth, 1924, at the Congress Hotel, Chicago.

Dr. Simmons is in his seventy-third year and wishes to retire from the position of Editor of the Journal and General Manager of the American Medical Association. Dr. Simmons has been one of the most prominent figures in medical progress in recent years. He has exhibited unbounded energy, vision, resourcefulness and qualities of leadership. To him, more than to any other person, credit is due for the wonderful development of the greatest medical association in the world. Under his guidance the official organ of the Association has become the leading medical publication and is not closely approached by any other Journal. He has been the object of suspicion and bitter attack, but imbued with a spirit of service has not been inclined to strike back, preferring to leave the defence of his motives and methods to others, and has steadfastly pursued the courses which he felt would lead to progress in the betterment of mankind through better medical service.

His associates have been concerned regarding his health for some time and have felt doubtful about finding a person who could fill the positions held by him. It has been stated that when the time of his retirement shall have come that no less than three men may be needed to carry on the work which he has inaugurated.

The size of the American Medical Association made its publications sought by medical authors who wished to reach the profession, and the contributions have been so numerous that the task of selection of acceptable papers alone has been onerous.

Dr. Simmons, through the Journal has led the fight against quackery and all forms of medical frauds. This feature of the organization has been of inestimable value in teaching the people what and whom to avoid. Opponents of medical progress have consistently, persistently, and bitterly assailed the American Medical Association but the attacks have reacted on its enemies.

This JOURNAL extends its congratulations to Dr. Simmons for the accomplishments of a life, the major portion of which has been devoted to upbuilding the medical profession.

The Committee in charge of the banquet is as follows: George Blumer, Hugh Smith Cumming, Harvey Cushing, John Blair Deaver, George Dock, Charles Phillips Emerson, Seale Harris, Ludwig Hektoen, Charles Franklin Hoover, Merritte Weber Ireland, Donald Macrae, Jr., Rudolph Matas, Charles Horace Mayo, Harvey Gilmer Mudd, Henry Sewall, George David Stewart, Edward Rhodes Stitt, Holman Taylor, William Sidney Thayer, Victor Clarence Vaughan, John Alexander Witherspoon.

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THE NEW ENGLAND STATES SECTION OF THE AMERICAN COLLEGE OF SURGEONS

THE meeting of this section was held in Providence, May 8-9, 1924. The Rhode Island Hospital, the St. Joseph Hospital, and the Memorial Hospital, Pawtucket, were open to the visitors and clinical exercises were conducted.

The conferences were held in the Providence Biltmore Hotel. The main features of the meeting were the various considerations of Hospital Standardization and Efficiency and meetings were in progress throughout the session at which all phases of hospital work were considered. The scientific papers and discussions were stimulating and instructing. One unusual feature was a moving picture depicting the instruments used and technic of tonsillectomy. The Community Health meeting in the evening of the first day was well attended by the public. Dr. John W. Keefe presided, and addresses were delivered by Hon. W. B. Flynn, the Governor of Rhode Island, Dr. W. H. P. Faunce, the President of Brown University, Dr. M. T. MacEachern, the Associate Director of the American College of Surgeons, the Rev. C. B. Mouliner, President of the Catholic Hospital Association, Dr. Henry Mock of Rush Medical College, and Allan Craig, Associate Director of the American College of Surgeons. This public meeting is a regular feature of the sectional meetings and has for its object the instruction of the laity in the benefits of hospitals to communities and the responsibility of the people in maintaining the highest possible efficiency in these institutions.

Rev. D. A. Deekman related the great strides made by the Methodist Episcopal Church in recent years in developing hospitals, for previous to 1881 the Church had no hospitals, but now has eighty-one and is striving to bring them all up to the acceptable standards. It is expected that within three or four years every Methodist hospital will be recognized as in the A class. His statement of the exceedingly low mortality rate which he claimed was brought about by a determination to have the best administrative and scientific service was a tribute to the management. The Rev. C. B. Mouliner, an orator of unusual ability, spoke of the long history of the seven hundred and sixteen Catholic hospitals in this country and the progress made in them. He pleaded for a readjustment of the mental attitude toward hospitals and believed that we are about to witness a new medical profession and new hospital ideals which will meet the needs of the world according to the better ethics and advanced scientific knowledge of the present day.

Dr. Daniel Fiske Jones spoke of the importance of the medical staff, stating that the greatest efficiency required that the larger hospitals should have closed staffs but that local conditions might require some modification such as a permanent staff with an associate staff. He felt very sure that the so-called open staff custom was not desirable from a professional standpoint. He explained the details of staff organization and felt very strongly that the hospital trustees and governing boards ought to be standardized in order to secure standardized hospital and professional work.

Dr. M. C. Winternitz of New Haven, in a logical and forceful address, brought out the advantages of the laboratory to the hospital and scored the badly arranged and poorly conducted laboratory. Witty references to the laboratory in the catacombs of the hospitals, the useless records, and the routine and unnecessary examinations gave force to his argument for he felt that the laboratory should be in the closest and most vital association with the real functions of the hospital and not a non-functioning and useless appendage devoting time consuming energy to perfunctory reports.

The scientific departments of hospital work were taken up and dealt with by other specialists. Practically every important phase of hospital administration received appropriate treatment. The addresses set forth the accepted methods and many personal ideas were expressed.

The officers elected for the ensuing year are Dr. John W. Keefe, President; Dr. Frederick B. Hussey, Secretary; and Dr. George A. Matteson, Counselor. An invitation to hold the next meeting of the New England States Section of the Clinical Congress of the American College of Surgeons in Connecticut was accepted. The place of meeting is to be determined later.

MENTAL HYGIENE

"JUST as the twig is bent, the tree's inclined." Recognizing the pliability of youth and the necessity for the prevention of morbid mental phenomena the Massachusetts Society for Mental Hygiene has prepared a series of leaflets for the instruction of parents and others who may have charge of children.

The suggestions offered are vital. Some people have a clearer insight into the fundamental causes of bad behavior and bad habits than others, but it is certainly true that all parents have at times felt more or less uncertainty as to the best ways to meet the moods of selfish or rebellious children. The treatment applied in a given case may establish or demolish normal mentality. The responsibility is great and calls for accurate understanding of the technic of discipline. It is generally believed that many of the mental disturbances of childhood if improperly treated may lead to permanent defects which may make the adult a burden on society or still worse an actual criminal.

Preventive methods are probably more important in this field than in many of the ordinary diseases, certainly more than has been recognized.

The leaflets referred to should be in every home where there are children. The directions and advice may help adults as well as the children. The battle is more than half won when a distracted mother is taught how to deal with her unruly boy, for the contest may have had an effect as bad for the mother as for the child.

The subjects considered in these leaflets are as follows:

No. 1. Does Your Child Fuss About His Food?
No. 2. Being a Parent Is the Biggest Job on Earth.
No. 3. Do You Make the Most of Your Child's Intelligence?
No. 4. Is Your Child Jealous?
No. 5. Does Your Child Have Temper Tantrums?
No. 6. Obedience.
No. 7. Enuresis (Bed-wetting).
No. 9. Some Conditions in Children That Would Suggest the Use of a Habit Clinic.

In the application of these suggestions much will be accomplished for the individuals and a great deal for the state.

MISCELLANY

U. S. VETERANS' BUREAU

CONGRESS has been asked to pass legislation that will wipe out the inequalities now existing in the medical personnel of the U. S. Veterans' Bureau and to provide such pay and living incentives as will attract the very highest grade of medical skill into the Bureau service, according to an announcement made by General Frank T. Hines, director of the Veterans' Bureau.

Director Hines called attention to the fact that the Bureau's doctors were now of three classes, those with Civil Service status, those holding commissions in the Public Health Service, and the special experts appointed by the Directors.

Under one Bill now before Congress, prepared by the Bureau at the request of the House Committee on World War Veterans Legislation, there will be established a permanent medical corps in the Bureau with commissioned personnel. Another proposal under consideration will create a reserve corps under the Public Health Service, of which the medical personnel of the Veterans' Bureau will be a part. A third suggestion is that of placing all of the Veterans' Bureau doctors on a Civil Service status. The plan to create a medical corps is most favored by the Bureau officials.

Director Hines announced that he has invited more than thirty of America's leading medical men to act as expert consultants to the Bureau.

The following consultants in Tuberculosis were selected: Dr. Edward Robinson Baldwin, Saranac Lake, N. Y.; Dr. Wm. Leroy Dunn, Asheville, N. C.; Dr. Kennon Dunham, Cincinnati, Ohio; Dr. Roy Adams, Washington, D. C.; Dr. James A. Miller, New York City; and Dr. Francis M. Pottenger, Monrovia, Calif.

As consultants in Neuro-pshychiatry, General Hines invited Dr. Wm. A. White, Superintendent, St. Elizabeth's Hospital, Washington, D. C.; Dr. Albert M. Barrett, Superintendent, State Psychopathic Hospital, Ann Arbor, Mich.; Dr. Wm. F. Lorenz, Wisconsin Psychiatric Institution, Madison, Wis.; Dr. C. Macafie Campbell, Medical Director, Boston Psychopathic Hospital, Boston, Mass.; Dr. Glenn E. Myers, Los Angeles, Calif.; Dr. Sidney Isaac Schwab, St. Louis, Mo.; Dr. Thomas Salmon, New York City; and Dr. Daniel Joseph McCarthy, Philadelphia, Pa.

In General Medicine and Surgery, the Director selected the following: Dr. Frank Billings, Chicago, Ill.; Dr. George Morris Piersoll, Phila., Pa.; Drs. W. J. and Charles H. Mayo, Mayo Clinic, Rochester, Minn.; Dr. George W. Crile, Cleveland, Ohio; Dr. Lewellys Barker, Johns Hopkins University, Baltimore, Md.; Dr. Simon Flexner, Rockefeller Institute, New York City; Dr. Ray Lyman Wilbur, President, Stanford University, Palo Alto, Calif.; and Dr. Joel Ernest Goldthwaite, Boston, Mass.

General Hines selected the following consultants in Hospital Planning and Construction: Dr. George H. Kirby, Psychiatric Institute, Ward's Island, N. Y.; Dr. S. S. Goldwater, Superintendent, Mt. Sinai Hospital, New York City; Dr. M. T. MacEachern, Chicago, Ill.; Dr.

Winford H. Smith, Johns Hopkins University, Baltimore, Md.; Dr. L. H. Burlingham, St. Louis, Mo.; Dr. W. C. Rapplaye, New Haven Hospital, New Haven, Conn.

Mr. Michael M. Davis, New York City; Dr. Douglas A. Thom, Boston, Mass.; and Dr. Livingston Farrand, President, Cornell University, Ithaca, N. Y., have been selected as consultants in Dispensaries and Out-patient Clinics.

General Hines stated that he believed it to be of great importance to the Bureau to obtain the services of these nationally known medical men and that he felt sure they would accept this opportunity of assisting in the recovery of America's disabled veterans.

FREE CLINIC FOR SPEECH DEFECTS OPENED TO RUN 6 WEEKS, BY THE SCHOOL FOR SPEECH EDUCATION, BOSTON, MASS.

The great demand for the free treatment of speech defects such as stammering, lisping, cleft palate and feeble minded speech was shown last summer and the summer before by the great number of cases which came to the free summer speech clinic. This demand will be met again this spring and summer by the re-opening of that clinic under the care of an experienced doctor and his assistants.

Last summer there were classes for stutterers, phonetic defects, cleft palate, feeble minded and the whistling class.

Cases came last summer from as far as one hundred miles away. There were many from the public schools of Boston and the public schools of other cities nearby. We hope to set an example to the public schools of Massachusetts as to the form of speech correction that they should employ.

The earlier the application the better. All you need to do is to send your name and address and the kind of case to the School of Speech Education, 110 Bay State Rd., Boston, Mass.

Your application will be kept on file and you will be given free treatment in the spring and summer speech clinics as soon as they open. Send a postal card only.

APPOINTMENT OF DR. A. H. PIERCE

Dr. Appleton H. Pierce, Senior Surgeon, U. S. Public Health Service Reserve, has been appointed as Medical Officer in charge of the recently completed U. S. Veterans' Hospital No. 95, Northampton, Mass., General Frank T. Hines, director of the U. S. Veterans' Bureau, has announced. The formal opening of this hospital occurred May 12, 1924.

Dr. Pierce received his public school education in the town of his birth, Leominster. In 1895 he graduated from the Harvard Medical School which was followed by an interneship at the Worcester State Hospital. Later he was appointed assistant physician in the Worcester State Hospital. From 1897 until 1917 he practiced medicine in his home town. During this time he devoted considerable attention to consultation practice in neuropsychiatry. He was appointed Associate Medical Examiner in the 3rd Worcester District, Commonwealth of Massachusetts, in 1903, remaining in office almost twenty years.

At the outbreak of the World War he was commissioned in the Medical Reserve Corps of the Army and was assigned to the Neuro-psychiatric Department. In May, 1918, he was assigned as Chief of the new Neuro-psychiatric Department, Base Hospital, Camp Jackson, S. C. In May, 1919, he was promoted to the rank of Major. His overseas service was with Base Hospital No. 85. He was honorably discharged from the Army September, 1920, having received a commission as Surgeon in the U. S. Public Health Service Reserve.

Dr. Pierce was ordered to U. S. Public Health Service Hospital No. 44, West Roxbury, Mass., where he served as ward surgeon and later as clinical director, assuming charge of the institution when it became known as U. S. Veterans' Hospital No. 44, in July, 1922. On April 1, 1923, he was promoted to the grade of Senior Surgeon.

FOOT AND MOUTH DISEASE

In view of the epizootic of foot and mouth disease in cattle in certain parts of California at the present time and the interference with travel and with the shipment of certain food stuffs (including milk) as the result of the presence of this disease, Acting Surgeon General White of the Public Health Service was asked to discuss foot and mouth disease from the viewpoint of its possible danger to human beings.

"The disease," Dr. White states, "is an acute, highly contagious malady affecting chiefly cloven-hoofed animals, such as cattle and sheep. Animals suffering from foot and mouth disease have fever, followed by an eruption consisting of vesicles (small blister like sores) occurring chiefly on the mucous membrane of the mouth and on the skin at the cleft of the hoof and less frequently on the udders and other portions of the skin. There is usually prolonged ill health and much wasting of the tissues.

"The germ which causes this disease has not been identified, but it is known that it occurs particularly in the exudate from the vesicles, in the saliva, and in the milk of infected animals, though it is not limited to these materials. It is readily destroyed by heat, such as the boiling or pasteurization of milk.

"Adult human beings are not very apt to contract the disease, but it is by no means rare among children.

"The question has been raised as to whether the disease in children known as 'impetigo contagiosa' may not be identical with foot and and mouth disease in animals, but no one has as yet been able to answer this question either in the affirmative or in the negative. Foot and mouth disease is not very fatal in cattle, and apparently much less so in human beings, if at all. It does cause serious losses when cattle are infected, because of the interference with the sale of milk, the reduction of the quantity of beef produced, and also on account of the expense and inconvenience resulting from quarantines against infected districts.

VICTORY FOR THE CIVIC LEAGUE

A COMPROMISE measure based upon the Initiative petition for the examination, classification and specialized treatment of convicted prisoners has been agreed upon by the Massachusetts Civic League, the proponents of the measure, and the Massachusetts Association of County Commissioners and Sheriffs, who opposed it. The Committee on State Administration has unanimously reported the bill, and leaders in both houses confidently predict its passage.

The bill provides that masters of county jails and houses of correction shall cause all prisoners serving a sentence of more than 30 days (except for non-payment of fine), and all who have been previously committed to any penal institution to be given a thorough psychiatric examination by a psychiatrist appointed by the Department of Mental Diseases. The results of such examinations with recommendations must be forwarded to the Commissioner of Correction and filed with the Probation Commission. Prisoners in state penal institutions are already examined. The Commissioner's present power of transfer remains unchanged.

It is now the duty of those interested in this matter to make sure that the law, if passed, is carried out and that, when sufficient data have been secured, suitable institutions are provided for the proper treatment of the different groups which a scientific study of the entire prison population of this state reveals.

A CANCER CLINIC AT FALL RIVER, MASS.

ON Saturday, May 10th, a cancer clinic was held at the Truesdale Hospital, Fall River, Mass.

From 8 a. m. to 10 a. m. Operations were done for

1. Pelvic tumor of doubtful origin.
2. Cancer of breast
3. Cancer of the female Bladder. Moderately advanced.
4. Tumor of the Breast (Malignant?)
5. Cancer of female Bladder—Advanced stage.
6. Cancer of the Rectum—Advanced.

From 10 a. m. to 11 a. m. Dry clinic during which good and bad results were demonstrated among patients who had been treated by operation, by Radium and by the Roentgen Ray.

From 11 a. m. to 12:30 p. m. Lecture on Cancer by Dr. Francis Carter Wood, Director of the Institute of Cancer Research, Columbia University.

Dr. George C. Wilkins of Manchester, New Hampshire, gave a lecture describing in detail the method which he employs in the use of Radium and the results obtained in his practice.

At a public meeting in the evening a symposium on "Cancer and Scientific Medicine" was held. The speakers were Dr. Francis Carter Wood, Fr. C. B. Moulinier, Mgr. James E. Cassidy and Rev. E. C. Herrick.

NATIONAL HOSPITAL DAY AT THE BEVERLY HOSPITAL

NATIONAL Hospital Day was observed at the Beverly Hospital by an Operative Clinic in the morning, followed by a demonstration of the following cases:—

Diabetes mellitus, Dr. Albert Parkhurst.
Acute arthritis, Dr. Albert Parkhurst.
Hematuria, Dr. Albert Parkhurst.
Laceration of tendons of forearm, median nerve, with nerve and tendon suturing. Dr. Peer P. Johnson.
1st and 2nd degree burns, Dr. Peer P. Johnson.
Carcinoma of rectum, Dr. Peer P. Johnson.
Duodenal ulcer, Dr. Peer P. Johnson.
Ectopic gestation, Dr. Peer P. Johnson.
Chronic cholecystitis, Dr. Peer P. Johnson.
Four cases of focal infection, Dr. Thomas Odeneal.

Meeting adjourned and a buffet lunch was served.

Tea was served in the afternoon by the Beverly Hospital Alumnae Association, and Dr. Albert Parkhurst spoke on "Diabetes and Its Treatment." During the afternoon a pleasing entertainment was given.

In the evening graduation exercises were held for the Graduating Class. Mr. Albert Boyden was the speaker of the evening. Reception and dance followed.

Yours very truly,
FRANCIS P. WEST, *Supt.*

ANNUAL MEETING OF THE WORCESTER DISTRICT MEDICAL SOCIETY

THIS was a well attended meeting. The business was promptly conducted. Under the suggestion of Dr. Ellison a committee was appointed to use every proper means to suppress illegal practice.

The success of the public meetings under the leadership of Dr. Marsh led the Society to appoint a committee which will carry on this plan of reaching the public.

The officers elected for the ensuing year are as follows:

President: Dr. L. R. Bragg, Webster.
Vice-President: Dr. R. P. Watkins, Worcester.
Treasurer: Dr. G. O. Ward, Worcester.
Secretary: Dr. P. H. Cook, Worcester.
Orator: Dr. M. J. O'Meara, Worcester.
Committee on Funds: Dr. Homer Gage, Worcester; Dr. David Harrower, Worcester; Dr. Ray W. Greene, Worcester.
Commissioner of Trials: Dr. W. P. Bowers, Clinton.
Councilors: Dr. W. P. Bowers, Clinton; Dr. S. B. Woodward, Worcester; Dr. F. H. Baker, Worcester; Dr. L. R. Bragg, Webster; Dr. W. J. Delahanty, Worcester; Dr. G. A. Dix, Worcester; Dr. G. E. Emery, Worcester; Dr. M. F. Fallon, Worcester; Dr. Homer Gage, Worcester; Dr. J. J. Goodwin, Clinton; Dr. R. W. Greene, Worcester; Dr. David Harrower, Worcester; Dr. E. L. Hunt, Worcester; Dr. A. G. Hurd, Millbury; Dr. A. W. Marsh, Worcester; Dr. L. C. Miller, Worcester; Dr. E. H. Trowbridge, Worcester; Dr. G. O. Ward, Worcester; Dr. F. H. Washburn, Holden.
Councilor on Nominations: Dr. David Harrower, Worcester; Dr. G. O. Ward, Alternate.
Censors: Dr. L. C. Miller, Worcester, Supervisor; Dr. L. T. Newhall, Brookfield; Dr. C. A. Sparrow, Worcester; Dr. E. H. Trowbridge, Worcester; Dr. J. J. Cummings, Worcester.
Nominating Committee: Dr. A. M. Shattuck, Worcester; Dr. G. C. Lincoln, Worcester; Dr. S. A. Bergin, Worcester; Dr. C. R. Abbott, Clinton; Dr. W. M. Grant, Worcester.
Librarian: Dr. A. C. Getchell, Worcester.
Library Committee: Dr. W. F. Lynch, Worcester; Dr. O. H. Stansfield, Worcester; Dr. W. F. Holzer, Worcester.
Auditing Committee: Dr. J. W. Cahill, Worcester; Dr. M. M. Jordan, Worcester; Dr. H. S. Simmons, Worcester.

The death of Dr. C. B. Stevens was announced as having occurred earlier in the day. He had been nominated as a councilor.

After the banquet Dr. Royal P. Watkins delivered the oration, the title being "The History of Surgery." This was a very carefully prepared and interesting address giving credit to those surgeons who have made valuable contributions to the science of surgery.

CANCER

Even in women with cancer of the breast who have borne children and suckled them I have been impressed by the frequency with which one is told that the affected breast had not been used for nursing, for some reason.

In Japan the death rate from cancer of the stomach, and also from cancer of the uterus, is about the same as in this country. But the incidence of scirrhus mammae is only one-tenth of the British figure. Here 18.6 per cent. of cancer deaths are from disease affecting the breast; in Japan only 1.8 per cent. Why? The readiest reason is that in that country far more women have children, and they usually suckle them for three years.—*A. Rendle Short, Surgeon to Bristol Royal Infirmary.*

FROM THE EYE SIGHT CONSERVATION COUNCIL OF AMERICA, TIMES BUILDING, NEW YORK CITY

Only 4,227,702 of the 24,000,000 school children in the United States received eye tests in 1923, according to a preliminary report issued by the Eye Sight Conservation Council of America embodying the initial findings of a nationwide survey of eye conservation in education and industry.

The returns from the survey of 247 city schools contain further evidence that very few school administrative systems include an adequate eye hygiene program. The survey of city schools covered a total enrollment of 5,602,633 school children. The returns indicate that only 2,184,149 or 39 per cent. enrolled in these city schools received eye tests in 1923.

The cities from which comparable data were received, according to the report, are located in the following eighteen states: California, Connecticut, Illinois, Iowa, Louisiana, Maine, Maryland, Massachusetts, Missouri, Nebraska, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, South Carolina and Texas.

The other thirty states, it is said, conduct tests only in the schools of some of the large cities, but this work is being carried on to a very limited extent in these states as a whole.

Simple visual acuity tests reveal that twenty-five per cent. of the school children in the United States have manifest defects of vision and symptoms of eyestrain. More thorough examinations indicate that over fifty per cent. of school children have eye defect of sufficient degree to warrant correction. There is no uniform method for testing eye sight, says the report, which continues:

> "The reported percentages of total corrected and uncorrected eye defects vary all the way from 3.5 per cent. to 58 per cent. A city in New Jersey reported only 3.5 per cent.
>
> "It is this demand as a result of eye defects that in many cases causes headaches, eye ache, cross-eyes, unnatural weariness after study, head tilting, squinting, frowning, sensitiveness to the light, and, in instances, nausea."

PHOTOGRAPHING THE GALL BLADDER

Drs. Evarts A. Graham and Warren H. Cole of the Washington University Medical School have demonstrated that if tetra-chlorphenolphthalein is injected into a vein it will appear in the gall bladder within three hours. Being opaque to the X-ray it outlines the gall bladder clearly and aids in the diagnosis of gall stones, and of other disease conditions, by alterations in the outline.

NEWS ITEMS

Nutrition Clinics.—A Nutrition Institute will be given by the staff of Nutrition Clinics for Delicate Children in Boston for two weeks from May 26 to June 7. The work of the first week will be especially for physicians. This is the 37th institute held by this organization—the 10th in Boston. These have been conducted in 22 cities in 17 states, and have been attended by over 2000 physicians, nurses, teachers, social workers and other persons having special interest in the problems of malnutrition.

Anatomists Elect a Woman President.—The American Association of Anatomists has elected Dr. Florence R. Sabin of Johns Hopkins University, President of the Association.

Dr. E. L. Hunt was invited to exhibit his new index system of hospital records before the New York section of the American College of Surgeons. He had previously explained the system before the Providence meeting.

Notes from the Harvard Medical School.—The class of 1924, Harvard Medical School, enjoyed an all-day picnic at the summer residence of Paul N. A. Rooney, Middleton, Mass., Saturday, May 17.

Dr. David Cheever is retiring from the Department of Anatomy in order to give more time to his surgical work. His place will be filled by Dr. Robert M. Green, who will have Mr. J. C. McCann as an associate.

Dr. S. V. Sewell of Melbourne, Australia, has been visiting at the Peter Bent Brigham Hospital, and has explained Hunter's treatment for spastic conditions by sympathectomy.

Worcester North District Medical Society.—Fellows of the society, with their ladies, were invited to attend exercises at Gardner in observance of National Hospital Day, Wednesday, May 14, 1924.

One P. M. at the Gardner State Colony.

Luncheon and presentation of unusual cases by Dr. C. E. Thompson and staff.

Demonstration of Handicraft to the ladies.

Three-thirty P. M. at Henry Heywood Memorial Hospital.

John Irving Pinckney, M. D., spoke on the ten-year program of the Mass. Dept. of Health in its campaign against tuberculosis.

Tea was served by Miss Barnaby and her assistants.

B. H. Hopkins, *Pres.*
C. H. Jennings, *Sec'y.*

The American Journal of Pathology.—The executive officers of the General Education Board of the Rockefeller Foundation voted, on February 28, to appropriate to the American Association of Pathologists and Bacteriologists the sum of $7500 a year for five years, towards the support of the American Journal of Pathology. This appropriation was made at the suggestion of Dr. Frank B. Mallory, now editor of *The American Journal of Medical Research*, which will change its name in January, 1925, to *The American Journal of Pathology.*

The American Journal of Medical Research, founded and originally edited by Dr. Harold C. Ernst, has for the past few years been the official organ of the American Association of Pathologists and Bacteriologists.

Dr. Mallory will continue the editorship of the journal under its new name.

REMOVALS

Dr. John J. Hartigan has settled in Andover, where he has an office at 98 Main St.

Dr. Theodore A. Stamas, secretary of the Middlesex North District Medical Society, suffered the loss of his office by a disastrous fire early in May and now has his office at 226 Central Street, Lowell, where he was situated up to a year ago.

CORRESPONDENCE

VIENNA LETTER

(*From Our Special Vienna Correspondent*)

April 23, 1924.

PROPOSED NOTIFICATION OF ABORTION

In a large provincial town of Austria the municipal Board of Sanitation intends to issue an order which makes it obligatory to notify cases of miscarriage. At a meeting of doctors convened to discuss the matter, the majority held that compulsory notification of abortion would have only one advantage—namely, that prosecution in cases of criminal abortion would thereby be facilitated, although malpractices could not be suppressed in this manner. Women would be driven into the hands of unauthorized midwives, and the number of deaths would be thus increased. The difficulty of ensuring secrecy in the working of a system of notification, and the serious injustice which might arise therefrom, occasioned the rejection of the plan.

CONSENT TO OPERATION

Recent legal proceedings involving the question of consent to operation have attracted considerable attention in Austrian medical and lay papers. One medical writer, in a careful review of the subject, states that the physician finds that he must in all cases either keep within the strict scope of the authority expressly given to him, or must so safeguard himself that he can prove by the testimony of reliable witnesses that he was asked to perform whatever operation he might find necessary, and the operation actually performed was, in fact, necessary or desirable. There is some confusion as to the person from whom consent must be obtained; it is, however, laid down as a general rule that this person is the husband in the case of an operation upon the wife, whilst for operations on children consent must be obtained from the parents, guardians, or other persons legally responsible for the care of the child.

INDICATIONS FOR SURGICAL STERILIZATION OF WOMEN

In a recent meeting of the Vienna Medical Society Dr. Neumann stated that the performance of an operation which will render a woman sterile for life is never justifiable except to avoid a dangerous pregnancy, and that a condition that justifies abortion may not justify female castration. A contracted pelvis should not be considered an absolute indication for sterilization, since with modern technique Caesarean section has become a comparatively safe operation; chronic nephritis may be considered an indication; psychic and nervous conditions are a doubtful indication; insanity may be curable, and, if it be severe, asylum segregation would render sterilization needless. In tuberculosis of the lungs abortion should be induced if there is hope for a cure. In hopeless cases sterilization is justifiable to avoid the strain of bearing and nursing a child. The most satisfactory method of operation is to remove the entire tube and close the superior angle of the uterus—the procedure which was advised by Professor Chrobak.

THE DEPLORABLE LIFE OF CHILD-WORKERS

The medical editor of the *Neues Wiener Journal* writes an article on the above subject. He says that the conditions of child labor in Vienna and the influence which such work must have upon the physique of the coming generation have more than once been alluded to in the medical and lay papers. He reverts to this subject again not because he wishes to work upon anybody's feelings, nor is it his intention in the least to exaggerate facts, but it will be acknowledged that an acquaintance of more than passing character with the real tragedies and hardships of the children from among the poorer classes of society is one of the best ways of becoming familiar with those present-day tendencies which make for the deterioration of the national physique. The recent disclosures at an inquest upon the death of a little girl of ten from burns, inflicted while she was working about the house for her mother, who was lying in bed, suffering from an acute influenza, reveal a state of things which is, unfortunately, prevalent enough. The father, who could have helped out the deceased child in her work (being Sunday, when he had leisure), was under the action of drink so that he could not move at all. Habits of laziness and self-indulgence on the part of the parents, brought on in the first place from physical incapacity caused by drink, are apt to become chronic, leading to a gradual shifting of household and even bread-winning work, with some of its responsibilities in addition, onto the shoulders of their helpless offspring. Children of tender age are set to "mind" others but little younger than themselves, while those who are somewhat older are put to some arduous fatiguing task such as selling papers or going round with milk, and this in addition to school work. Stage children are, perhaps, more jealously guarded, but only because the public eye is upon them. In a similar way restrictions are rightly placed upon the hours of duty and nature of the work performed by children in factories, an age-limit being also prescribed. But it is far more difficult to put any check upon the improper bringing up of the young, or upon their employment for unsuitable or laborious work. This can be accomplished only by a wider dissemination of the knowledge of hygiene.

MASSACHUSETTS MEDICO-LEGAL SOCIETY

Worcester, Mass., May 15, 1924.

Editor of Boston Medical and Surgical Journal:

The annual meeting will be at New Ocean House, Swampscott, Friday, June 6, 1924, at 2 P. M. Buffet lunch for members and guests at 1 P. M.

This will be a meeting of unusual opportunity to the medical examiners, as we are to be honored by the presence of the Hon. Jay R. Benton, Attorney-General of Massachusetts.

The meeting will take the form of a round-table conference led by the Attorney-General, wherein all moot-points in the law and our practice under the law can be submitted to the chief legal authority of the State. Invitations to be present and participate are also being sent to the District Attorneys.

Members are requested to send questions or suggestions to the secretary at once so that a suitable "agenda" for the conference can be prepared.

"Let's have 100 per cent. attendance.

Ernest L. Hunt, *Secretary.*
Geo. L. West, *President.*

MASSACHUSETTS GENERAL HOSPITAL

Editor, Boston Medical and Surgical Journal:

In connection with the Health Institute we conducted in this hospital on May 7 a clinic as outlined in the enclosed card. The number of persons that visited the clinic was 17. Among this number the diagnosis of cancer was made as follows:

2 cases recurrent carcinoma of breast,
2 cases probable carcinoma of stomach,
1 case carcinoma of larynx,
1 case epithelioma of lip,
1 case epithelioma of nose.

In those not presenting symptoms of cancer no treatment was required beyond relieving their minds of undue anxiety. The positive cases were put in the way of proper treatment.

The number of medical men visiting the clinic numbered between 40 and 50. It may be said that approximately one-half of these were medical students.

Very truly yours,
F. A. Washburn, M.D., *Director.*

ATTENDANCE AT MEETINGS HELD IN CONNECTION WITH THE N. E. HEALTH INSTITUTION

The Boston Medical & Surgical Journal:

Your letter to Dr. Dowling for information as to the attendance of the special meetings at the City Hospital in connection with the N. E. Health Institute, I regret that I have to report small attendances. The amphitheatre demonstration brought in about ten outside physicians and thirty students. The demonstration by the X-ray Department was attended by twenty physicians. Unfortunately we had no way of counting any increase in the number of patients examined in the Out-Patient Department that morning. Unquestionably there were a number of patients who asked for an examination for cancer that morning, for four applied directly at the Superintendent's office for examination. I wish I could report a larger attendance at the meetings.

Yours very sincerely,
Halsey B. Loder, M. D.

NEW ENGLAND DERMATOLOGICAL SOCIETY

The Boston Medical & Surgical Journal:

At the annual meeting of The New England Dermatological Society, held at the Boston City Hospital, the following officers were elected for the year 1924-1925:

President: Dr. Henry J. Perry.
Vice-President: Dr. C. G. Lane.
Secretary: Dr. C. M. Casselberry.
Treasurer: Dr. W. P. Coues.
Councillor: Dr. H. J. Lloyd (3 years).

C. M. Casselberry, *Secretary.*

A CORRECTION

Editor Boston Medical & Surgical Journal:

Figures do not lie, but those who figure are (it is said) often liars. A figurer of sorts, I lay no claim to the liar's halo, and wish to purge myself of a false statement made in a certain circular entitled "Smallpox or Vaccination, Which?"

On page four it is stated that the City of Lansing, Michigan, harbored in the three years 1920-22, 10557 cases of smallpox. These figures obtained from a source usually reliable are apparently grossly inaccurate.

The total number of cases recorded by the State Board of Health during those years was but 7168, and an injustice has been done the City of Lansing which corralled but 308 of the number. It may be of interest to know that the Michigan State Board of Health agrees that in the eleven years 1913-1923, 26972 cases of smallpox were recorded at their office, against the 457 of Massachusetts, during the same time.

The two states have practically the same number of inhabitants..

We have compulsory vaccination of Public School Children. Michigan has not.

Verbum sat sapienti,

SAMUEL B. WOODWARD.

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DEATH NOTICES

DR. WINSLOW BURRELL FRENCH, a retired homeopathic physician, died at Rockland, his native town, May 11, 1924, at the age of 54. He was graduated from Boston University School of Medicine in 1891. Two years later he took postgraduate work in Vienna. He engaged in practice in Boston, and at one time was surgeon on the staff of the Boston Baptist Hospital, the Massachusetts Homeopathic Hospital, consulting surgeon at the Emerson Hospital, and assistant in gynecology at the Boston University School of Medicine.

He was an honorary member of the Massachusetts Homeopathic Medical Society and the Massachusetts Surgical and Gynecological Society, and belonged to several Masonic bodies. In 1893 Dr. French married Miss Martha E. Foster of Rockland. He was the son of Joseph E. and Ellen (Burrell) French.

DR. CHARLES ALLEN DAVIS, a retired member of the Massachusetts Medical Society, died at his home in South Dennis, April 29, 1924, at the age of 75.

He was a graduate of Harvard University, School of Medicine, in 1883, and had been a Fellow of the State Medical Society from 1911 to 1921, when his name was placed on the retired list.

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NOTICES

A CORRECTION

On page 833, No. 20 of Volume 190, the designations of positions held by the authors of the article entitled "The Value of the X-Ray in Pulmonary Diagnosis" were misplaced. Dr. Randall Clifford is Physician to Out-Patients, Massachusetts General Hospital. Dr. Max Ritvo is Assistant Roentgenologist, Boston City Hospital.

NOTICE OF EXAMINATION FOR ENTRANCE INTO THE REGULAR CORPS OF THE UNITED STATES PUBLIC HEALTH SERVICE

Examinations of candidates for entrance into the Regular Corps of the U. S. Public Health Service will be held at the following-named places on the dates specified:

Washington, D. C.	July 7, 1924
Chicago, Illinois	July 7, 1924
New Orleans, La.	July 7, 1924
San Francisco, Calif.	July 7, 1924

Candidates must be not less than twenty-three nor more than thirty-two years of age, and they must have been graduated in medicine at some reputable medical college, and have had one year's hospital experience or two years' professional practice. They must pass satisfactorily, oral, written and clinical tests before a board of medical officers and undergo a physical examination.

Successful candidates will be recommended for appointment by the President with the advice and consent of the Senate.

Requests for information or permission to take this examination should be addressed to the Surgeon General, U. S. Public Health Service, Washington, D. C.

THE NEW HAMPSHIRE PUBLIC HEALTH INSTITUTE

The New Hampshire Public Health Institute will hold its sessions at the State University, Durham, July 1-12, under direction of State Board of Health, State Board of Education and other Health Agencies.

SCHEDULE OF LECTURES

1.	Health Administration,	8 lectures
2.	Preventable Diseases,	4 lectures
3.	Tuberculosis,	7 lectures
4.	Venereal Diseases,	4 lectures
5.	General Diseases,	3 lectures
6.	Child Hygiene,	7 lectures
7.	School Health Program,	11 lectures
8.	The Public Health Nurse as a Factor in the Community,	3 lectures
9.	Industrial Hygiene,	4 lectures
10.	Mental Hygiene,	2 lectures
11.	Problems of the Feeble Minded,	2 lectures
12.	Nutrition,	4 lectures
13.	Essentials Necessary to the Success of the Public Health Program,	4 lectures

AMERICAN THERAPEUTIC SOCIETY

The twenty-fifth annual meeting of the American Therapeutic Society will be held at Toronto, Canada, June 6 and 7, 1924. Hèadquarters, Academy of Medicine, Queen's Park.

DISEASES REPORTED TO MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

WEEK ENDED MAY 10, 1924

Disease.	*No. of Cases.*	*Disease.*	*No. of Cases.*
Actinomycosis	1	Scarlet fever	371
Chickenpox	178	Septic sore throat	3
Diphtheria	130	Smallpox	2
Dog-bite requiring anti-rabic treatment	4	Syphilis	34
Epidemic cerebrospinal meningitis	1	Tetanus	2
German measles	87	Suppurative conjunctivitis	18
Gonorrhea	113	Trachoma	2
Influenza	6	Trichinosis	1
Measles	842	Tuberculosis, pulmonary	151
Mumps	265	Tuberculosis, other forms	20
Ophthalmia neonatorum	15	Typhoid fever	16
Pneumonia, lobar	113	Whooping cough	71

SOCIETY MEETINGS

STATE, INTERSTATE AND NATIONAL SOCIETIES

June 3 and 4:—American Urological Association at Ambassador Hotel, Atlantic City, N. J.

June 6 and 7:—Mass. Medical Society, Annual Meeting, New Ocean House, Swampscott.

June 6 and 7:—American Therapeutic Society, 25th annual meeting, Toronto, Canada.